LECTURES

ON THE

ANATOMY, PHYSIOLOGY, AND DISEASES

OF THE EYE,

By MR. LAWRENCE.

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Lecture XXXI.

Affections of the Lachrymal Organs.

Gentlemen,

The *lachrymal*, like other conglomerate glands, is little subject to disease; indeed, I never saw an instance in which it was separately diseased;* of course, it will become diseased when all the contents of the orbit are involved in some common change of structure. Beer speaks of inflammation of the gland proceeding to suppuration; and he says, that after the bursting of such an abscess, a fistulous opening sometimes remains, through which a clear fluid will be discharged. Scirrhus of the gland is mentioned as well as the formation of hydatids; if either of these affections should happen, we must consider it as a case of simple tumour of the orbit, and deal with it accordingly; we must extirpate it, and we shall probably not know that the lachrymal gland is the affected part, until we have removed it. It has been said by Beer that scirrhus will commence in the lachrymal gland, and extend to the orbital contents generally. I have seen nothing of this kind.

The internal angle of the eye is frequently subject to *inflammation* of an *erysipelatous* character: the swelling being seated near the lachrymal sac, giving one the idea that it is produced by an affection of the sac itself: however, it is often independent. The lachrymal ducts may be involved in the inflammation, and some degree of watering of the eye may take place. In a mild case of erysipelas the inflammation may gradually subside, and no mischief ensue; but it sometimes extends to the lower lid, and produces considerable redness and pain; the inflammation may extend to the lachrymal ducts and sac, and cause increased mucous secretion, with obstruction to the absorption of the tears. When this inflammation proceeds to suppuration, as soon as you are satisfied by the appearance and feeling of the part, that matter has formed, make an opening into it, and let it out; by doing which, you prevent the increase of the abscess, and diminish the risk of subsequent deformity.

It sometimes happens that the abscess is not only seated immediately over the sac, but that it communicates with the cavity, and whether it does or not, the rule of treatment is the same; viz., to open the abscess and evacuate the matter. When from the fluctuation of matter, and from the obstruction of the nasal duct, you have reason to believe that such a communication exists between the abscess and sac, you are not to introduce probes into the sac through the nasal duct; you should treat the case just as if no such communication existed, puncture the abscess, let out the matter, and employ such measures as will sooth the parts and remove the inflammation; you will find that the aperture will heal, and the nasal duct again become pervious. You must recollect that the mucous lining of the sac and of the duct is in an inflamed state, and you can do no good by introducing probes and other foreign bodies, and in fact, you can learn nothing by doing so: there-

* An interesting case of enlarged and indurated lachrymal gland, extirpated by Mr. Lawrence, since the delivery of this lecture, is recorded in the present volume.—See case of John Clifton, p. 159.

fore be content with opening the sac, and keeping the parts quiet, until the inflammation has subsided, when you may know further what is required. The general result of such cases, if properly managed, is, that the opening heals up as the inflammation subsides, and the tears find their way through the proper channel into the nose.

I have seen one instance of a minute capillary aperture in the anterior part of the sac. It was in a boy at school, and seemed to be a natural peculiarity, as no inflammation nor any other affection of the part had ever been noticed; a small drop of clear fluid appeared in the corner of the eye, and he removed it with his handkerchief. It caused no inconvenience; and my advice was that it should be left alone.

Epiphora.

There are certain states of the eye, in which the lachrymal secretion appears redundant; a greater quantity of fluid is poured out than is necessary to lubricate the organ, and more than the lachrymal ducts can take up. Hence, tears often flow over the lower lid, especially on exposure to a cold wind. This is called in common language the "watery eye," or technically, *epiphora*. The latter term is properly applied to increased secretion of tears; while the dripping consequent on deficient secretion is named *stillicidium lachrymarum*.

Common irritation of the external surface will occasion increased secretion; as we see from cold winds, acrid fumes, and extraneous substances; the same effect may be produced by sympathy merely in inflammation of the conjunctiva, and chronic inflammation will keep up a watery state of the eye for a long time. In all these cases we see a distinct cause of the epiphora, namely, an increased excitement of the gland, and if we remove these causes the effect will cease. The epiphora goes off in proportion as the eye regains its natural state. But there is sometimes an increased secretion of the lachrymal gland, which cannot be traced to any of the causes I have enumerated. The patient complains of the eye watering, and that it is very troublesome, especially when exposed to the action of the air; there is no redness of the conjunctiva, nor any exciting cause that can be immediately discovered. In such cases, after having given the organ rest, and tried to improve the habit of the patient, we may use some slightly stimulating or astringent wash to the eye, as weak solution of sulphate of zinc, or copper, in rose water, and we generally find that these, combined with a little attention to the bowels, will remove the affection.

Stillicidium lachrymarum, as contradistinguished from epiphora, may be produced by any cause which interferes with the regular excretion of the tears. Sometimes there is a contracted state of the puncta lachrymalia; and hence it has been recommended to introduce a minute probe into these openings, and gradually increase its size, so as to enlarge the orifice. At first, we may introduce the point of a pin, and afterwards one of Anel's probes. I have sometimes found the contraction so considerable, that it was very difficult to see the exact place of the punctum: the use of the pin generally renders them visible. I have never seen any obstruction of the lachrymal ducts, except as a consequence of accident, or from the pressure of tumours.

In attempting to introduce a lachrymal probe, it is necessary that you should be aware of the exact direction of the lachrymal ducts, that they do not pass in a straight line from the puncta lachrymalia to the sac, but first proceed perpendicularly, and then making a sharp bend or elbow, proceed horizontally, or nearly so, to the sac. In order, therefore, to introduce a probe, you should carry it first perpendicularly downwards (supposing it to be the lower lid), and then turn the point, so that it may pass almost horizontally to the sac. This proceeding is seldom necessary; indeed the introduction of the probe answers no purpose, more often doing harm than good.

The most common cause of *obstruction*, is a thickening of the mucous membrane of the *ductus ad nasum*.

The lachrymal sac and nasal duct are liable to inflammation, and that very frequently. When you consider the peculiar structure and situation of these parts, that they are almost enclosed within a bony hollow, that they possess great vascularity, you cannot wonder at the severe pain and constitutional disturbance which attend the local affection. It is in consequence of the unyielding structure, with which the sac is surrounded, that great pain is felt when the sac is inflamed, and that pain extends to all the surrounding parts of the orbit and head; the pain commences in the internal angle of the eye, and spreads through the orbit and head, and proceeds even to the degree of causing delirium occasionally. There is generally great external tumefaction; great serous deposition into the

cellular texture over the sac, extending to the palpebræ, so much so as sometimes even to close the eye, and the swelling extends to the temple, and even the whole head. From the tumefaction of the membrane, the passage of the tears becomes obstructed, and consequently they flow over the cheeks. Under these circumstances you may easily suppose that there is acute febrile disturbance, and such as will require active measures to remove. When inflammation of this kind exists, it may terminate in different ways; sometimes it produces an effusion of coagulable lymph into the sac and duct, and consequent obliteration of the cavity. It may terminate, as it often does, in suppuration, and you are aware of that happening by the cessation of pain, or rather by the symptoms becoming less urgent. The abscess may burst externally, and the disease be removed; but I have seen the skin covering the sac, so distended before the bursting of the abscess, that mortification has ensued. Not long since, a case of that kind occurred here; the patient, who was a woman, was of a full plethoric habit, and would not consent to have the abscess opened, the consequence of which was, that the skin sloughed; so that, in estimating the importance of the case, you must not judge merely from the extent of surface of the inflamed membrane. Supposing this to take place, supposing the abscess to communicate externally with the cheek, you will have a discharge of pus and tears through the opening for some time. More commonly the inflammation produces merely increase and alteration of the natural secretion of the membrane, which assumes a thick yellow appearance resembling pus: the inflammation will then gradually subside, the secretion slowly changing to the natural state of mucus, and the tumefaction of the membrane abating: thus the natural calibre of the duct and sac may be restored, and the tears pass again into the nose; the increased discharge from the inflamed membrane will cease, and the complaint thus come to an end. If, during the period of acute inflammation, the nasal duct should have become permanently obstructed, its surface, and that of the sac, pass into a state of chronic inflammation, attended with increased mucous secretion, which accumulates in the cavity, together with the lachrymal fluid. Thus a tumour is produced in the corner of the eye, and when you press on it, these fluids issue from the puncta lachrymalia.

Treatment of Acute Inflammation of the Sac.

When inflammation is marked by the characters I have mentioned, it must be treated actively by the antiphlogistic plan. It is necessary, in the most severe cases, to take blood from the arm, or by cupping from the temple or nape of the neck; but leeches to the interior angle will answer the purpose in milder cases. The loss of blood by these methods must be repeated until the inflammation is reduced. Fomentations and poultices are the best local applications; the internal treatment and diet being the same as in other inflammations.

Chronic Inflammation.

In chronic inflammation of this membrane, producing obstruction and an interruption to the passage of the tears, you have a tumour in the internal angle of the eye; a watery state of the eye, the tears flowing over the cheek; there is also a dryness of the nostril of the affected side, from the tears not passing as usual into it. The tumour in the internal angle is sometimes colourless, but in many instances it is more or less red, and the degree of redness will depend upon that of the inflammation. The size of the tumour varies from that of a small pea to a nut; this depends partly on the duration of the affection; however, the sac sometimes enlarges considerably, without any apparent reason. On pressure, the contents of the sac may be made to flow either through the puncta, or through the nasal duct; the latter, however, is seldom the case. The fluid thus pressed out may be either mucus or pus combined with the tears, and its appearance will furnish you with some idea of the actual state of the membrane. When the secretion is copious, it sometimes comes out of the puncta spontaneously. From this increased discharge, the affection has been termed, in this chronic stage, *blennorrhœa sacci lachrymalis*. The sac will fill once or twice in twenty-four hours, and persons who are the subjects of this affection, sometimes content themselves with this mode of relief, rather than employ any more active measures. When the sac has been some time in this state, there is generally sympathetic affection of the palpebræ, slight chronic inflammation of their mucous lining, some increased mucous discharge, and more or less affection of the Meibomian glands, with increase of their secretions. The symptoms, however, so far as the eye is concerned, vary according to circumstances in this chro-

nic inflammation. When the organ is not under any excitement or irritation, there is no stillicidium of the tears, and no inconvenience is felt; but when it is exposed to sharp winds or cold air, increased secretion of the tears takes place, which cannot be disposed of in the usual way, but flow in abundance over the cheek irritating the eye itself, and proving altogether very troublesome to the patient. The existence of this chronic inflammation in the lachrymal sac, often keeps up an irritability in the eye, and renders it prone to inflammation from slight occasional causes. If the eye should be much employed in reading, writing, or other modes of exertion, itching, pain, and increased flow of tears will be produced, while a continued exposure to the same cause will bring on even considerable inflammation.

In these cases we must turn our attention to the *degree* of *inflammation*; the increased secretion is the effect of inflammation, and the obstruction to the passage of the tears is the consequence of the same cause, producing tumefaction of the lining membrane, and thus diminishes the cavity of the duct. It is an inflammatory affection originally, and the obstruction is kept up by inflammation.—Generally speaking, we do not find any clear views of this affection in the works which profess to treat of the surgical operations to be performed on the eye. The affection is spoken of as obstruction of the nasal duct, requiring operation; and we find it considered under the head of *fistula lachrymalis*, as if that were an essential condition. Scarpa appropriates, in his work on the diseases of the eye, one chapter on this subject, of which he gives what seems to me a very singular and erroneous view. He says, that "there is no disease in these cases in the lachrymal sac and nasal duct, but that obstruction may be traced to the inflammation affecting the mucous lining of the lids; that the viscid secretion, which the mucous membrane produces, lodges in the lachrymal sac and nasal duct, and causes an obstruction of them." He says, that the palpebral mucus is so tenacious, and the secretion of the Meibomian glands so thick, that they cannot pass through the nasal duct. He seems so confident of this view of the case being correct, that he adopts a practice founded on it; he employs astringent washes to the eye, and stimulating ointments to the margins of the lids, to correct these morbid secretions. For my own part, I believe such an opinion and practice to be entirely wrong. If a fluid can find its way through the small lachrymal puncta and canals, is it reasonable to suppose that it will stick in and block up the much larger nasal duct? In many of the affections of the lids there is manifestly an increased secretion, and that of a viscid and tenacious kind; but we never find that in these affections, such as chronic tinea, purulent and gonorrhœal ophthalmia, that any obstruction of the duct occurs as a consequence. Again, in lippitudo, where the Meibomian secretion is so much altered, no such result ensues. There is not, in my opinion, any single proof of the doctrine advanced by Scarpa; it removes our attention from the actual seat of disease to a part which is often perfectly healthy, and never suffers except secondarily.

Treatment.—Our object is to remove the chronic inflammation, and therefore we put leeches over the internal canthus, and adopt other measures for the same purpose; and we shall find that such treatment will prevent the formation of that state, which is properly called fistula lachrymalis, a term indiscriminately and absurdly applied to all obstructions of the nasal duct. The application of leeches then, with the use of cold washes and suitable internal treatment, will, in many cases, remove the inflammation; the swelling of the membrane subsides, the increased mucous secretion is stopped, and the passage of the tears is restored. When all appearances of inflammation are removed, the obstruction may continue, with increased secretion, the sac becoming distended, and requiring occasional pressure for its evacuation. If these symptoms continue, the treatment recommended by Scarpa may be advantageous; we may find some astringent wash or stimulating ointment necessary. The citrine ointment, or the ointment of Janin, may be useful, applied along the lids, as before recommended, in cases of tinea. To apply a stimulating wash, it is only necessary to put a little of it into the internal angle of the eye, from which place it will be absorbed by the puncta lachrymalia and carried into the sac. There is a small silver syringe, with a point sufficiently small to pass into the puncta lachrymalia, and thus to inject the fluid into the sac; but I know of no better mode of carrying the fluid into the sac than by pouring it into the internal canthus, and allowing it to be absorbed. In addition to the employment of the astringent wash, or ointment, it is right that the patient should gently press out the contents of the sac once or twice in the twenty-four hours, and that just before the wash is dropped

into the eye; and in this way you will generally succeed in removing all unpleasant symptoms connected with the complaint, although the patient may have an occasional accumulation of tears in the internal canthus, and they may flow now and then over the cheek.

Permanent obstruction of the nasal duct may be produced as a consequence either of acute or chronic inflammation; or it may be thus obstructed from the extension of disease into it from the nose, and it occurs in this way occasionally in strumous children. Inflammation begins in the membrane of the nose, and creeps on to the nasal duct. Variolous inflammation is another frequent cause in children. If, in consequence of this permanent obstruction, any great inconvenience be felt, and if it be not removed or benefited by the means I have recommended, it becomes necessary to take further measures for removing the obstruction and restoring the passage of the tears into the nose. If the disease be neglected, much mischief may ensue. The sac may slowly enlarge in consequence of continued distention, so as to make a considerable swelling at the corner of the eye; it is still filled with a mixture of tears and mucous secretion: this state has been called, technically, dropsy of the sac, or *hydrops sacci lachrymalis*. It admits of being emptied by pressure either upwards through the puncta, or downwards into the nose. If the tumour formed by the distention of the sac cannot be thus emptied, but feels firm and resisting, such a case has been called *hernia* of the lachrymal sac.

Fistula Lachrymalis.

There may be, however, a formation of matter with the obstruction of the sac, with ulceration opening externally; and this, properly speaking, is the *fistula of the lachrymal sac*. From this opening a sort of fungous growth may arise, and with this state of parts you may have caries of the os unguis; such consequences arise from the continuance of the inflammation, which gave rise to the obstruction. Before you think of performing any of the operations directed in surgical books for fistula lachrymalis, it is necessary to satisfy yourselves that there is a permanent fistula, that the case cannot be remedied by other means; if you previously treat the patient on the principles already pointed out, the instances will be very few in which any operation will be required. The reason why you should try to cure the disease in the way I have before mentioned is, that the operation itself is only a temporary and imperfect remedy; if you merely restore the passage, and do nothing else, the patient will be under the necessity of constantly wearing some foreign body in the duct, to keep it pervious, which must be regarded as a great inconvenience.

The various modes of procedure proposed for the relief of the cases I have just mentioned, are enough of themselves to fill a moderate volume; it is not my intention to enumerate them or to enter into a detail of their merits; many of them are never to be thought of. A French surgeon, Anel, who invented the probes for the puncta, devised also a syringe for the purpose of injecting fluid into the lachrymal sac, and thus forcing the obstruction. But all the force you could use, by such a mere capillary injecting tube, would not do much to overcome a firm adhesion of the duct; and in point of fact it generally happens, that as soon as the fluid is thrown in at one punctum it flows out at the other. Sir William Blizard proposed the method of injecting the lachrymal sac with quicksilver, by means of a steel stop-cock and glass tube, such as are used in injecting the absorbents. Now the quantity of fluid the lachrymal sac contains is about equal in volume to a garden pea. The force thus applied would certainly cure no obstructions that would not have got well without any treatment.

It has been proposed, and often practised, to introduce a gold or silver tube into the nasal duct, by an incision into the sac. The mode of procedure, in such cases, is this; the tendon of the orbicularis palpebrarum is the guide for the incision; you puncture the tumour with a narrow double edged knife below the tendon, and thus carry it into the sac. You then introduce a probe into the opening, and carry it downwards and inwards, until you come to the point of resistance, and then you carry it almost perpendicularly downwards, but a little inclined backward; and then gradually increasing the pressure, you find that it passes through the obstruction, and you generally may be aware of the passage of the probe into the nose, by an escape of a little blood. When this is done, you introduce a tube about three quarters of an inch in length, made of silver or gold, contracted towards the bottom, and gradually spreading out toward the upper part; you introduce this upon the probe, and push it beneath the integuments, so that the upper or expanded portion may

rest in contact with the sides of the sac. The skin will heal on the tube, which is to be left permanently in the duct: thus an artificial passage is provided for the tears, and the immediate result o fthe operation appears extremely favourable. Unfortunately, the future history of these cases is far from being satisfactory; indeed, one might rather expect, *a priori*, that a foreign substance of this kind would not be likely to answer the purposes of the natural tube: hence we find that after a few weeks or months, the tube gets out of its place, or is choaked, and the obstruction to the passage of the tears is reproduced. The tube either gets too low, or what is more frequently the case, rises in the sac, and occasions so much inconvenience, that it is necessary to remove it. This mode of operating was extensively employed by M. Dupuytren at the Hotel Dieu, and, according to his account, proved very successful; but a young surgeon, who took the pains of tracing out and following up these cases after they had left the hospital, found, that in the greater number of instances, the method had completely failed within one or two years after the operation.

The same operation was performed, in this country, by Mr. Wathen, who was the predecessor, and afterwards the partner of Mr. Ware; and that the operation had failed, may be inferred from the circumstance of Mr. Ware's having proposed and recommended another mode of operation.

Beer recommends the employment of catgut for enlarging the constricted duct. The sac is to be opened in the way before described, and after the probe has been pushed into the nose, a piece of catgut is to be introduced into the sac and passed through the duct, until it comes ont of the nose. You must lay hold of the extremity of the catgut, and fasten it against the ala nasi by a piece of sticking plaster: the rest of the catgut is to be fastened against a cap or a tape passed round the brow. Every day you are to draw down a fresh portion of catgut through the sac, and remove that which had been there previously; after thus consuming a piece of catgut of the ordinary length and size of the fiddle string E, he commences with a similar length of the string A, and then with the string D; and after this last has been passed through, he considers the cure as complete, and allows the sac to heal.

The mode of proceeding most employed, at present, is, to make an opening in the sac with a double edged knife as before described, to clear the obstruction by passing a probe through the nasal duct which will generally require some force, and then to introduce a small silver probe, having a head somewhat like a nail, which prevents it from sinking into the sac, and this instrument is called Mr. Ware's nail headed style. You must remember, however, not to introduce the style, until the opening, which you may have made in the sac, has closed a little; for if you do, the head of the instrument will slip into the sac, and give you some trouble. You might at first suppose, that the introduction of a substance, which fills up the opening you have made in the part, would not at all assist in restoring the passage of the tears; but the fact is, that the part becomes enlarged about the style, just as the urethra becomes enlarged about the elastic catheter; and thus the intention of the operator is fully answered. I have recommended patients to wear the style constantly, only taking it out to cleanse it; they soon learn to remove and to replace it for themselves. As far as my experience has gone, this method will preserve the permeability of the duct with the least inconvenience to the patient.

It has been recommended, when repeated inflammation of the sac has taken place, and when the former plan of proceeding cannot be easily effected, to expose the sac and destroy its surface by the *kali purum*; but I never saw a case in which that was necessary. Another plan has been suggested, namely, that of perforating the os unguis, but I have never seen it necessary to adopt that proceeding.

There may be obstruction of the duct from the extension of disease into it from the nose; as in syphilis, in polypous excrescences of the nose or antrum. Suppuration of the sac and fistulous openings upon the cheek are not uncommonly seen under such circumstances. We can here only palliate the inconveniences which the patient suffers.

LECTURES

ON THE

THEORY AND PRACTICE OF PHYSIC,

By DR. CLUTTERBUCK.

Theatre, General Dispensary, Aldersgate-street.

Lecture XLII.

On Inflammation of the Ligamentous Structure.

Gentlemen,

Under the denomination *ligamentous system*, I include the ligaments and capsules surrounding the joints, together with the tendons and tendinous aponeuroses, or *fasciæ* covering the muscles; to which, perhaps ought to be added the *periosteum*. Some have considered the *dura mater* of the brain, the *pericardium*, and even the *sclerotic coat* of the eye, as belonging to this order of parts, and liable to similar states of disease. Whether this is properly done, I shall not attempt to decide. It is, however, to the ligaments connecting the bones together and forming the different joints, and to what is termed the tendinous aponeurosis or fascia covering the different muscles, and perhaps to the tendons themselves, that my present observations are intended to be confined.

Ligamentous structure of the nature now alluded to, exists pretty extensively throughout the body, but is particularly abundant in certain parts; as over the loins, down the external part of the thigh, at the back of the neck, and covering the temporal muscles. This structure has some physiological peculiarities that require notice, as they materially influence its diseases and their treatment.

Compared with other parts, the ligamentous structure is but sparingly supplied with blood vessels, few if any being visible in a healthy state, though under inflammation they become conspicuous and numerous. These parts likewise are endowed with but little sensibility in health, very few nerves being supplied to them; some indeed, judging from this insensibility, have doubted whether they possessed any nerves. This doubt however appears to be removed by the high degree of feeling they acquire under inflammation, and by which they become the seat often of very severe suffering.

This structure, like every other, is susceptible of inflammation, which has several peculiarities that serve to distinguish it from other inflammations, and which materially influence the treatment. These peculiarities it is important you should attend to.

In the first place, ligamentous inflammation is not attended with much swelling of the part, which arises from the great density of the structure not allowing of much effusion into the interstices of the part. It is true that a good deal of swelling often attends these inflammations; but this is owing to the extension of the inflammation into the surrounding cellular texture.

2dly. Inflammation frequently exists in this order of parts for a great length of time, without either going into suppuration, or otherwise changing the structure. Often, however, it induces a degree of rigidity and inflexibility, the consequence, for the most part, of adhesions taking place in the surrounding cellular membrane.

3dly. Inflammation in parts of this description, is very apt to shift its seat, and that often very suddenly: generally, it is from one part to another of similar structure, and which occurs with respect to parts very remotely situated from each other. This is what you are to understand by the term *metastasis*.

Lastly, ligamentous inflammation is difficult of cure, as compared with many other inflammations; but, as some compensation for this, it bears almost all kinds of treatment with impunity, and then goes off at last spontaneously, the disease seeming, as it were, to wear itself out.

The general term applied to ligamentous inflammation is *rheumatism*, the import of which, however, has no reference to the real nature of the disease, and is therefore one among almost innumerable instances of improper nomenclature in medicine. The disease termed the *gout* or *podagra*, is also essentially an inflammation of ligamentous structure; but this has so many peculiarities that distinguish it from rheumatism, and which extend to the treatment, that it has generally been considered in the light of a specific disease; at all events it requires separate consideration. I shall first speak of *rheumatism*, one of the most frequent, as well as most painful diseases; seldom dangerous in itself, though it occasionally gives rise to other diseases that prove fatal, as I shall hereafter shew you.

To proceed then methodically; *rheumatism* may be defined an inflammation

of the ligamentous structure connected with the different joints, and covering the muscles attached to them. In its simplest form, it is characterised by few and those unimportant symptoms, without any derangement of the general health. On many occasions, however, it gives rise, like other inflammations, to great general disorder, being attended with a high degree of *pyrexia* or symptomatic fever, as it is called, and that in a higher degree than in perhaps any other disease.

Simple rheumatism often begins with a sense of coldness, and with paleness of the skin covering the part affected. The joint becomes stiff, and gives pain upon motion. The pain follows the tract of the muscles, and is generally of an obtuse kind. These few symptoms are, in reality, all that are necessary to constitute the disease. It is often confined to a particular part, and named accordingly; as *lumbago*, when seated in the loins; and *sciatica*, in the hip: in other parts it has had no distinct appellation bestowed upon it. The *deltoid muscle* of the arm is a frequent seat of the disease. In some of these cases, the pain is very acute, especially when the muscles about the part are put into action. This is the case in *lumbago* more particularly; and appears to be owing to the muscles being thrown into a state of temporary spasm. Sometimes the affection is more general, producing an almost universal feeling of soreness and stiffness over the body. Rheumatism, when thus mild and limited in extent, and without general disorder, has been often termed *chronic*, in order to distinguish it from the more violent forms of the disease, which have been called *acute*. But the term *chronic*, as implying long duration, is not applicable to most of these, as they often go off after a few days or even less. Sometimes, however, the disease is protracted for months or even years, varying much with times and seasons. Such really chronic cases gradually lessen the power of motion in the joint, and the muscles waste, and degenerate, as it were, into a paralytic state.

Sometimes there is considerable swelling, with redness of the skin and more severe pain; but still without inducing *pyrexia*, or a febrile state of system. This, by way of distinction, has been called the *acute rheumatism*. But when *pyrexia* arises, with quickness of pulse and great increase of heat, the disease has been called *rheumatic fever*. The disease in all these cases is radically the same: they differ merely in degree, and there are all the gradations between them.

The progress and duration of rheumatism, are exceedingly differen a different times. Many slight cases continue only a few days and go off again, like a *common cold*. Others are protracted for months or even years, as I before remarked, when of course the term *chronic* applies with strict propriety. The most important variety of the disease is that which is termed *rheumatic fever*, the term *fever* however, merely serving to express the general febrile action that is taking place, and which is symptomatic as in other inflammations. The severity and occasionally the danger of this, makes it deserving of further attention.

Rheumatic fever, as it is called, frequently begins with coldness and shivering, which are soon followed by heat, and this by sweating. The febrile symptoms are modified in some degree by the habit of the patient, and the duration of the disease. In strong subjects, the heat is greater, the sweatings more profuse, and the pulse is fuller and stronger, than in any other inflammation. The frequency of pulse, however, is not proportionably great. The blood, when drawn is more highly buffed and cupped, than in other inflammations. The tongue is covered with a white instead of a brownish fur; and there is, in ordinary cases, no headach or disturbance of the sensorial functions. By these last-mentioned signs, you may distinguish *rheumatic*, from *idiopathic* or brain-fever; though the two are occasionally found in combination, each marked by its appropriate signs.

With respect to the *local* symptoms, which are the cause of the general disorder of system just described, the pain in the affected parts is often very severe, and is attended with much swelling and redness of the skin, and tenderness to the touch. These arise from the inflammation spreading from the ligamentous structure, to the surrounding parts. When the inflammation has continued for a few days in any particular part, it commonly begins to decline, but a similar train of symptoms appears in some other part, and follows a similar course. Thus, as an example, after one hand and wrist has been affected in the manner mentioned, the other will be seized; then perhaps the elbow, and, in succession, the shoulders, feet, knees, loins, &c.; till, in its turn, almost every part of the body where ligamentous structure exists, participates in the disease. And it not unfrequently happens, that when it has thus seemingly run its course, it renews its attack on one or more of the parts that had previously suffered, by which its duration altogether is greatly prolonged. This is much

more likely to happen if the inflammation is quickly taken off from any part by local means; such as leeches, but especially if cold applications are made use of: but where the inflammation in any part is allowed to run its course, such a recurrence seldom happens. It seems as if in the former case, the diseased *action* only were removed, the *disposition* remaining behind; whereas, in the latter, the disposition appears to be worn out by the continuance for a certain time of the inflammatory action. In this way, the disease is often protracted for eight or ten or twelve weeks, when it gradually declines; sometimes going off entirely, at others leaving the local symptoms behind, though in a mitigated form; and thus the *acute* disease lays the foundation for the *chronic*.

The *pyrexia*, or general febrile state of body, continues to accompany the local affection; but after a time, as perhaps three or four weeks, it assumes a remittent form, being aggravated towards evening and through the night, when the sweating is the most profuse. The pain and other local symptoms follow a similar course.

In weak and irritable habits, and also when the disease is long protracted, the pulse becomes frequent, hard, and small; there is considerable depression of the general strength, and much irregularity in the state of various functions, such as I described to you in detail when speaking of the effects of inflammation upon the system.

Terminations.—Rheumatism, in a great proportion of instances, goes off entirely without injury to the structure, and this although it may have continued for a great length of time. But sometimes, in consequence of adhesions taking place, and the deposition of coagulable lymph, stiffness, and rigidity of the parts remain, by which motion is impaired. Suppuration is a rare occurrence, both because ligamentous structure is not much disposed to this change, and perhaps because the inflammation that occasionally takes place in the surrounding cellular membrane, is seldom in a sufficient degree for such a purpose.

I have thus given you, gentlemen, the general character of rheumatism, in its ordinary and legitimate form. But sometimes it attacks, or rather induces inflammation, in other parts of greater importance to life, and thus is liable to become dangerous, though in itself it can hardly be so considered. For the most part, it is in structures approaching somewhat to the ligamentous, that inflammation is observed to arise during the course of rheumatism. The *periosteum* is one of these; and hence those aching pains in the bones which patients often complain of. The *pericardium* is another part that frequently becomes inflamed during rheumatism, and which is denoted by pain in the region of the heart, and great disorder in the action of this organ. The inflammation thus excited, continues in many cases after the rheumatism has disappeared; and in this way originate many chronic affections of the heart.

Sometimes the brain or its membranes suffer, the signs of inflammation in this organ presenting themselves, such as severe headach and often delirium, which now and then prove quickly fatal. The lungs or pleura, or both, still more frequently suffer, a considerable number of cases of acute rheumatism being attended in their course with evident signs of pulmonic inflammation. These cases of inflammation arising accidentally during the course of rheumatism, have been considered and called rheumatism of the heart—of the brain—and of the lungs; and even the sclerotic coat of the eye has been supposed to be the seat of rheumatism at times, and the term rheumatic ophthalmia has been used to designate it. But I much question the propriety of considering these cases as real rheumatism: while the mistake, if it be one, is productive of practical mischief, by suggesting the notion that such cases do not require to be treated like common inflammation, which however is quite contrary to my experience; as I shall have occasion to state further to you, when speaking of the treatment of the disease.

Causes.—The general exciting causes of rheumatism in all its forms, is *exposure to cold*, the application and effect of which are in general so direct and obvious, as not to be mistaken. In fact, we have no certain knowledge of any others. *Syphilitic pains* are indeed liable to be confounded at times with those of genuine rheumatism, and can only be distinguished by inquiring into all the circumstances of the case, by which its real nature may generally be discovered.

As with respect to many other diseases, the operation of the cause is much influenced by *predisposition*, which is in some individuals constitutional, and even hereditary: when this exists, the disease will be readily produced by any ordinary exposure to cold. The disposition to this disease is also greatly influenced by season and weather. Thus it is most frequent in the spring, and especially when long easterly winds prevail. At such

times, the disease may be said to be epidemic.

Nature of Rheumatism.—I have already told you that this disease consists in inflammation of the ligamentous structure, and there is no reason to believe the inflammation to be different in nature from common inflammation as it appears in other parts. The difference in character and in treatment, is owing to the difference in structure, and the different laws by which this structure is governed.

Prognosis. — In itself, rheumatism, though a disease of great suffering, can hardly be said to be attended with danger, though it sometimes proves fatal in the way of *metastasis*, that is, by giving rise to inflammation in other parts of importance to life. I think I have observed that the secondary inflammations thus induced are more easily removed by art, than when taking place as primary diseases. Where there is so general a disposition to inflammation in the system, it appears to have the effect of lessening the disposition in particular parts.

Treatment of Rheumatism.—Not only are the symptoms of inflammation different, but its general course and treatment likewise, are much modified by the nature and functions of the part affected: and hence the necessity of considering inflammation in all its forms and varieties, in order to successful practice. This you will find to be the case in regard to our present subject, and it applies still more strongly to the case of cerebral inflammation, as we shall see when we come to the investigation of what is called *idiopathic* fever. From what I have now said, you will not be surprised to learn that the proper treatment of rheumatism is a distinct point of inquiry, not to be altogether determined by the case of other inflammations.

Now the treatment of rheumatism is different under different circumstances; and we shall best understand the subject, by again adverting to the division before pointed out, into the simple state of the disease, where the affection is local and partial in extent, and that where it is attended with *pyrexia* or general disorder of system, or what is termed *rheumatic fever*.

Slight and recent rheumatic affections either subside of themselves, or require only the treatment of a common cold, as a moderate degree of abstinence, or at most the exhibition of a mild sudorific. The severer affections of the sort, such as *lumbago* or *sciatica*, are so painful, and so incapacitate the patient for all exertion, as to demand a more active practice. If the patient is vigorous, *bloodletting* once or twice, and that to a pretty considerable amount, is of decided advantage, and adds much to the efficacy of our other remedies. In weak persons, *bloodletting* may be dispensed with. *Counter-irritation* of various kinds, general or local, are next to be employed. *Sudorifics*, as the hot-bath, camphor and opium, the ammonia, and various other active *stimulants*, come under the former head. Active vomiting and purging conduce to the same end. I have often succeeded in relieving *lumbago*, by half a grain of the *elaterium*, (which generally excites both vomiting and purging,) following it by opium in the dose of a grain or two. Warm fomentations to the loins, blisters, and stimulating liniments, are likewise all of use in greater or less degree.

Lumbago is liable to be confounded with *nephritic* affections; but a little attention will enable you to distinguish between them: you have only to recollect the diagnostic signs of nephritis and of renal calculi; the distinction then is sufficiently easy. So when the ligamentous structure about the hip joint is the seat of rheumatism, (*sciatica*), the great irchiatic nerve is apt to be involved in the inflammation. It then frequently happens, that the only pain the patient complains of, is about the knee or the ankle. In this case, it is a question whether our topical applications are best made at the origin of the disease at the hip-joint, or at the part where the pain is situated? Blistering, for example, the knee or ankle? I am inclined to the latter opinion, though it is difficult to determine the point satisfactorily.

In the really *chronic* form of rheumatism, which is sometimes left after the acute disease, but which also often arises almost imperceptibly, the pain is not violent but constant, and is increased both by warmth and motion at first, but grows easier after a time. The limbs become stiff, and the muscles waste, partly perhaps from want of use. In some instances, the hands become useless from the enlargement of the joints (*nodosity*, as it has been called) and their subsequent contraction. These chronic states of rheumatism are best relieved by the warm bath, by stimulants of the most powerful kind, such as ammonia and the guaiacum in large doses, and the oil of turpentine. *Camphor* with *opium*, and other *sudorifics*, are likewise of service. Along with these, local agents are not to be neglected, as fomentations, stimulating liniments, leeches if there should be heat

or swelling of the part, and electricity moderately applied. *Mercury* taken internally will sometimes do good; and *arsenic* has often succeeded where other means have failed. The *colchicum* has of late obtained much celebrity in these cases, and, I believe, deservedly so: but I question its utility, and even its safety, when largely administered in the acute state of the disease.

These are the chief means of cure in the local and chronic forms of rheumatism, and which you are to apply according to your judgment, and the particular circumstances of the case. The treatment of the acute disease, or what is called *rheumatic fever*, and its consequences, will make the subject of our next lecture.

FOREIGN DEPARTMENT.

ANATOMY.

On the Velum Pendulum Palati of Man, and the rest of the Mammalia. By Dr. J. F. Dieffenbach, Berlin. (Hecker's Medicinische Annalen, March, 1826.)

The velum pendulum of man stands in intimate connexion with the power of speech, since the act of swallowing appears to be one of its more subordinate functions. It is formed, in a certain degree, with reference to the propagation of sound, and is proportionally broader than in any other animal, or at least forms a large regular vaulted surface, and the most regular arch; whereas on the contrary, in several of the quadrupeds, it is long and narrow, and inferiorly where it terminates in the throat, frequently of a shovel-like shape. The velum pendulum of the mammalia appears to be more an auxiliary organ of deglutition, and to have but a slight influence on the production of sounds, and the relative harmony of their tones; for I remarked, after injury of this organ in animals, scarcely any perceptible change in their sounds, but considerable difficulty of deglutition. A dog barked quite naturally after a complete division of the soft palate, but swallowed particularly soon after the infliction of the wound, with great effort. On the contrary, in man, if there is the smallest opening in the velum, or any loss of substance on the edges, it impedes in an important degree the articulation of the different sounds, and destroys the harmony of pronunciation. In extensive destruction of the uvula and congenital division of the palate, we find a total loss of the harmony of the human voice, and in the last, where great pains are taken to remedy this defect, a rough and unnatural sound always remains behind. If other parts are wanting, which contribute to the power of speech, if portions of the edges of the jaw or lips, or of the tongue, are destroyed, the effect which loss of these parts at first exerts on the voice, is very soon counteracted, through exercise, by the neighbouring parts. Thus Gräfe found in a case where both lips were destroyed, the labial letters intelligibly uttered by closing the corners of the mouth on the teeth; and in another instance, after extirpation of a great part of the tongue, the power of pronunciation completely returns.* Generally speaking, in every large opening in the uvula, the letters *c*, *g*, *z*, cannot be pronounced, and *k* is spoken as *h*, *q* as *hu*, *p* as *b*, *t* as *d*, and *r* generally as the syllable *ert*. In aggravated cases of disease, where not alone the soft, but also the bony palate, the alveolar processes and lips are divided, and a middle portion of bone, with its teeth, projects like a snout, the proper human voice is of course always wanting. Then the power of mastication and swallowing suffers, as in infancy that of sucking does, since in the cavity of the mouth no vacuum can be formed, and liquids, as well as solids, readily come out through the nose. In such cases, the swallowing of liquids in the recumbent posture is quite impossible; and where the division exists merely in the velum, and has not been observed, the child might die from hunger, if it were not put to the breast in the erect position. Roux, in his work *Sur la Staphyloraphie*, relates an instance of this kind, where a child eight days old, the defect in the palate being entirely overlooked, was nearly starved; he tried to give the child, in the erect position, some sugar water, and succeeded in getting down into the stomach a glassful; the child revived, and perfectly recovered.

Notwithstanding the thorough investigations which have taken place respecting the anatomical structure of the palate in the healthy state in man, there is no detailed description whatever of this part in animals. Even Cuvier, in his "Comparative Anatomy," dwells very briefly on it; and Rudolphi, by new in-

* Gräfe über die Gaumennath; im Journ. d. Chirurg. und Augenheilk. 4 Bd. 1. St. s. 2, 3.

quiries, and a series of interesting observations, has thrown the greatest light on these important parts*. In all the lower animals, without exception, the velum pendulum palati is wanting. In fishes there is no connexion between the mouth and the cavities of the nose, and they are therefore completely dumb. In the amphibious tribe there is a connexion between these parts, by means of very small openings, yet all the animals belonging to this class breath with their jaws closed, through the nose, for the air is conducted by the motions of the glottis to the rima glottidis, which, by means of its strong muscles, alternately opens and shuts. Yet we see in no species of this class, not even in the testudo, any trace of a velum. Their sounds, therefore, are hollow, resounding from the throat, and without any modulation. In the crocodile only, is there any arrangement bearing a resemblance to the velum. The posterior openings of the nares are situated very far behind, and form in the back part of the bony palate round openings. From these openings a process of the skin descends, which covers the arch of the palate, and forms a fold that becomes broader to the sides, and proceeds to a projection of skin situated behind the root of the tongue. The two processes make by their free edges the isthmus faucium; the one covers in part the posterior opening of the nostril, but does not quite close it; the other contributes in common with the rudiment of the epiglottis to the formation of the rima glott. In birds, also, the velum pendulum is entirely wanting, but the perfection of their voice, and the variety of their tones, are owing to a peculiar organization in the bottom of the trachea. In the middle of the hard palate are openings which correspond to the choanæ of the mammalia. In the cetaceous animals, the velum pendulum is perceived in form like a fleshy tube surrounding the pharynx, which extends into the cavities of the nose. By these the water which these animals take with their food, is squirted out through the upper openings of the nose.

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PHYSIOLOGY.

Experiments on the Effects of Injuries of particular parts of the Brain. By Dr. H. HERTWIG, Lecturer at the Royal Veterinary School, of Berlin.[1]

The first experiments to try the effects of injuries of different parts of the brain, appeared to have been tried by Peter Molinelli;[2] but by far the most important ones have been made by Boerhaave,[3] Haller,[4] Zinn,[5] Zimmermann,[6] Arneman,[7] Lorry,[8] Saucerotte,[9] Rolando,[10] Fodera,[11]

[1] Hecker's Litterarische Annalen der gesammten Heilkunde, May, 1826.

[2] Commentar. Bononiens. pag. 130.

[3] Impetum faciens dictum Hippocrat per corpus consentiens. Lugd. Batav 1745. 8.

[4] Memoire per les part sens. et irritab. du corps animal. Laus. 1760.

[5] Experimenta quædam circa corpus callos. cerebellum, etc. Gotting. 1749.

[6] Dissertatio de irritabilitate.

[7] Versuche uber das Gehirn und Rückenmark. Gotting. 1787.

[8] Acad. des Sciences. Memoire de Savans etrang. iii.

[9] Acad. roy. de Chirurgie. Prix. iv.

[10] Saggio sopra la vera struttura de cervello. etc. Sassari 1801, and Magen,

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The first experiments to try the effects of injuries of different parts of the brain, appeared to have been tried by Peter Molinelli;[2] but by far the most important ones have been made by Boerhaave,[3] Haller,[4] Zinn,[5] Zimmermann,[6] Arneman,[7] Lorry,[8] Saucerotte,[9] Rolando,[10] Fodera,[11]

[1] Hecker's Litterarische Annalen der gesammten Heilkunde, May, 1826.

[2] Commentar. Bononiens. pag. 130.

[3] Impetum faciens dictum Hippocrati per corpus consentiens. Lugd. Batav. 1745. 8.

[4] Memoire per les part sens. et irritab. du corps animal. Laus. 1760.

[5] Experimenta quædam circa corpus callos. cerebellum, etc. Gotting. 1749.

[6] Dissertatio de irritabilitate.

[7] Versuche uber das Gehirn und Rückenmark. Gotting. 1787.

[8] Acad. des Sciences. Memoire de Savans etrang. iii.

[9] Acad. roy. de Chirurgie. Prix. iv.

[10] Saggio sopra la vera struttura del cervello, etc. Sassari 1801, and Magen-

Legallois,[12] Magendie,[13] Flourens,[14] and Krauss.[15] By the experiments of these different inquirers, we have obtained considerable information respecting the functions of the cerebrum, cerebellum, corpora quadrigemina, pons varolii and medulla oblongata, and are, in fact, as far advanced in our knowledge of the uses of these parts, as of many organs of the human body. Some points, however, still remain involved in obscurity, and this has arisen, in a great measure, from contrary results being obtained from experiments apparently the same. The cause of this difference is not difficult to detect, it lies partly in the mode of making the experiment, as well as the unavoidable difficulty attending the experiments themselves. Of all the experiments made on this subject, those of Flourens afford the most important, and, perhaps, the most decisive results. The manner in which this physiologist conducted his experiments is peculiar to himself, and one great cause of his success; he separated, for instance, the part of the brain on which he was going to make the experiment, as completely as possible from the surrounding soft and bony parts, so that its boundaries could be observed without any of the neighbouring parts being injured. After the whole brain, or the part only destined to be experimented on, had been laid bare, Flourens confined himself, in most of the cases, either to its entire removal with the knife, or its removal layer by layer; in a few cases he irritated the brain by punctures. The most important results which Flourens obtained from his numerous and various experiments are as follow: each particularly developed or formed part of the brain is destined for the performance of particular functions, the hemispheres of the cerebrum being the organ of the mental faculties, (understanding, memory, and will,) and the centre of all the perceptions. The cerebellum is the organ in which the different muscular motions are ordered for a particular purpose, and directed to one common object. In the corpora quadrigemina, the original active principle of the iris, the retina, and optic nerves, is placed. Irritation only of the corpora quadrigemina, medulla oblongata and spinalis, are capable of exciting muscular contractions: the power of sensation is essentially a single one, and resides in a single organ. Injuries of the lobes of the brain, of the corpora quadrigemina, and cerebellum, when they do not exceed a certain point, deprive these organs of their different functions, merely for a short time.

Although these, and a few other results at which Flourens arrived, are not entirely new, but, in part, complete, and confirm the experiments of earlier physiologists; although these results are not in opposition to most of our established pathological and physiological principles, but confirmatory of them, still a few are so extraordinary and striking, that they have naturally excited doubt as to their accuracy. These doubts will also be increased in the minds of all who have made such experiments, from the difficulties attending their performance. The chief cause of the difficulty is the bleeding, which, in some cases, produces death before the essential part of the experiment is terminated or even begun. Even if the bleeding should not cause death, symptoms of debility come on, and a kind of paralysis, which may be mistaken for the effects of injury of a particular part, whilst they are only produced by causes unconnected with the function of any one organ. The blood, when it collects in the brain or skull, acts prejudicially by pressure and irritation, so that the symptoms produced by these causes must not be mistaken for the consequences of the injury. Flourens was obliged to contend against these impediments, and, in order to avoid them as much as possible, he performed his experiments on young animals only, because the skull in these was soft and tender, and the sinuses, in proportion, less developed. But all this is not sufficient to prevent the hæmorrhage and its bad consequences, for in young animals, and particularly young dogs, cats, and pigs, there is no part of the skull which, on being wounded, does not bleed. I will now proceed to the detail of my own experiments, and confine myself at first to those which were performed on particular parts of the cerebrum.

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die's Journal de Physiologie. April, 1823.

[11] Recherches experiment. sur le système nerveux; in Magendie's Journal de Physiologie. 1823. No. 2.

[12] Experiences sur le principe de la vie.

[13] Memoire per quelques découvertes recentes rélatives aux functions des système nerveux, and in different parts of his journal.

[14] Recherches experim. sur les propriétés et les functions du système nerveux dans les animaux vertebrés. Paris, 1824.

[15] Dissert. de cerebri læsi ad mot. volunt. relatione, Vratislaviæ, 1824.

First Chapter.—On the Mode in which the Experiments were made.

Mr. Flourens has not given the mode in which he has performed his experiments, and considering this a point of great importance, it remains for me to enter into those details which he has omitted. In the majority of cases the hair or feathers were first shaved off from the greater part of the head; then the skin was cut through from before backwards, and the muscles on the front and back side of the head dissected away. After the bleeding attending these steps had ceased, the skull was opened; in young and small quadrupeds, birds, fishes, and frogs, the opening was carefully made with a a simple knife; in the older quadrupeds, however, always with the saw or trephine. In using this last instrument, I was obliged, in the larger animals, to employ two or more crowns. I always endeavoured to avoid the sinuses, and frequently left, where I laid bare the two hemispheres from above, an arch of bone over the falx major; the lateral and occipital sinuses were also avoided. After the removal of the bone, the membranes of the brain were cut through in a crucial direction, the largest vessels being as much as possible avoided. Notwithstanding this precaution, the bleeding unavoidably consequent on this step of the operation, was so great, that I endeavoured to still it by pressure with a sponge, or the application of cold wet cloths. If left to themselves several animals perished, and others were so much weakened, that the experiment could not be completed then. In most cases I found this delay of advantage, because, on the following day, the wounded vessels had closed, and thus the flow of blood into the cranium prevented. Chemical agents for the suppression of the bleeding were not employed. The hæmorrhage was most profuse in dogs and cats, less so in horses and rabbits, and least of all in mice and birds. In the experiment on the cerebellum, the bleeding was always the greatest; in those on the hemispheres of the brain it was the slightest. Prior to the experiments, every precautionary measure was taken about the health of the animal to be experimented on; and, after them, the parts were covered, and then protected from the effect of any accidental cause. I found Flourens's remark that animals with an overloaded crop did not stand the experiment well, quite true, and therefore always let them fast a little before the experiment. The instrument which I used, independently of those employed in opening the skull, were, 1st, a thin straight scalpel; 2d and 3d, two small spoons, with small handles for the removal of the cerebral substance from the cranium; the one had obtuse, the other sharp edges. In using the first, the wounding of the large vessels at the base of the brain must be avoided; in using the latter, great care must be taken not to use any undue pressure on the parts in the neighbourhood. 4th, a curved needle cutting at both edges. 5th, a needle of the same shape, but provided with a knob at the point. These two instruments were used in the experiments on the internal and deep situated parts.

Second Chapter.—Experiments on the Hemispheres of the Brain.

1. A thin superficial layer, about a quarter of an inch in thickness, was removed from the right hemisphere of a middle sized dog. The animal manifested no signs of pain; but in its walk there was a slight degree of weakness to be observed on the left side of the body. All the functions were undisturbed.

2. But, on removing from the same dog a thick slice from the substance of the right hemisphere, so that the right ventricle was only covered with a thin layer of medullary matter; the animal showed, it is true, no distinct marks of pain, but the whole left side of the body was evidently lamed, and all the motions followed, in a half circle, to the side where the injury of the brain was situated. Vision of the right eye was undisturbed, but, in the left, quite gone. The iris in the left (blinded) eye, on being touched or suddenly exposed to a strong light, was just as sensitive as in the sound eye. Hearing appeared to have suffered very little since the animal knew when its name was called out. The power of smell, and taste and touch, had suffered just as little; since caustic ammonia, and fœtid animal oil, held under the nose of the animal, or dropped on the tongue, excited sneezing and a great aversion to these substances. No change whatever could be observed in the pulse, pulsations of the heart, respiration, or temperature of the animal. The animal seemed very weak, and on the first day ate nothing; on the second he was rather cheerful, but still lay down a great deal. On the seventh day the dog was quite restored, and all interruption to vision, as well as the voluntary motions, gradually disappeared.

3. After nine days I removed from the same dog the remaining portion of the right hemisphere close to the base of the skull. Even now the animal exhibited

no mark of any peculiar sensation; it twitched a little, and showed some signs of pain on the removal of the last layer. The same effects followed when the dura mater was touched. In the other particulars the issue of this experiment was almost similar, the effects being only a little more marked than in the preceding. The animal was, for instance, completely blind on the left eye, and the muscles of the left side were nearly entirely paralysed. It lay on the right side, bent nearly double, and could not stand without help; and when supported could not walk straight, but always moved on in a circle to the right side. The motion of the right fore and back feet was quite normal, but, on the opposite side, neither flexion nor extension could be properly performed. The other functions were not disturbed, merely weakened.

I now took from the left half of the cerebrum sufficient to lay open the ventricle on this side. The dog then became stupid and deprived of all the senses; he could not move from the place where he lay; but if powerfully pushed or painfully irritated in some other way, it went, or rather stumbled for a few steps to the right side, but as soon fell to the ground, and relapsed into its former state of insensibility. The animal could be very easily turned from one side to the other; he lay chiefly in the bent position on the left side; and if placed on the back or the right side, convulsive contractions of nearly all the muscles followed, and continued till he were again turned on the left side, or placed on the back. The extremities were deprived of all strength, and the joints very flexible. The heart's pulsation and the pulse were diminished five or six beats in the minute; the breathing and the warmth of the body were not materially changed. The animal refused all nourishment, and died on the following day of convulsions.

4. From another dog I removed the left half of the cerebrum, close to the base of the skull. In the destruction of the brain the animal did not manifest the slightest pain, but became immediately blind on the right eye, and completely paralysed on the whole right side of the body. The motion of the right iris was not impaired. The power of hearing appeared weakened, but not in one ear more than in the other. In order to be certain on this point, I stopped up alternately each ear, but perceived no difference in the hearing of either. I could not either accurately ascertain whether the taste and smell were similarly affected or not; but certain it is, that these senses were not destroyed, for some hours after the experiment the dog found a piece of flesh wrapped up in paper, which it devoured. Afterwards, however, it took no more nourishment, and died on the fourteenth day from convulsions.

5. I removed from the left hemisphere of the brain of a horse, as much as laid open the lateral ventricle from above. The animal appeared so much weakened that it could scarcely stand. When it contrived to support itself it was always with the body bent to the left side, and all the motions were made to that side. The animal did not exhibit the slightest pain in the operation, nor were any convulsions to be observed. The right eye had lost its power of vision, but the motions of the iris were not in the slightest affected. No disturbance to any of the other functions could be perceived. In consequence of hæmorrhage and accumulation of blood in the cavity of the cranium, convulsions occurred on the second day, from the effects of which the animal died.

6. Both hemispheres were removed in a rabbit, layer by layer; and in proportion to the quantity of cerebral substance removed, the animal was more and more stunned. It sat six hours in succession without moving or making any noise, and neither saw the flame of a wax light brought close to its eyes, which were open, nor felt it when the hair by the nose was absolutely singed. No noise was capable of rousing this animal, which, under ordinary circumstances, is so very timid. It appeared to smell no strong substances, which were brought under the nose; and neither ate nor drank. The iris was sensible to the light. If the animal were pushed, it could, although weak, run and spring without impediment. In the space of six hours the rabbit moved of its own accord, and went a few steps, but struck its head against every thing which was near it, and then relapsed into its former state. After twelve hours time it appeared to perceive a strong smell, and the sensitiveness of the skin was greater; but still the vision was gone. Whilst going forwards it struck itself violently, then making a loud noise, it fell to the ground, where it remained paralysed on the left side, and in forty hours died.

7. The anterior part of the left hemisphere in a pigeon was removed down to the lateral ventricle of that side; the corpora striata, the optic thalami and the under part of the root of the olfactory nerve being avoided. No indication of pain was manifested. The vision of the

right eye was gone, but the motions of the iris were unimpaired. The power of the muscles on the injured side was not affected, but that of the opposite side was very much lessened. The pigeon began to eat, and was on the whole very lively, and in the space of five days, recovered the sight of the right eye. The other senses remained unaltered.

8. In another pigeon I cut away the posterior part of the left hemisphere, taking care to avoid the optic nerve. The result was quite the same as in the other case.

9. A third pigeon, from which both hemispheres close to the lateral ventricles were removed, so as to lay open the lateral ventricles, appeared quite stunned, and deprived of the power of hearing. It sat just as if it were in a gentle sleep. As the bird took no food, I gave it some pease, of which it swallowed only those which I had thrown over the tongue into the pharynx. Those which were merely introduced into the beak fell out again, or remained within it. The pigeon sat for ten or twelve hours in the midst of a heap of pease, without taking one from them, and often stood longer than 12 hours in water without even tasting it. The muscles appeared in these birds to have suffered but little, since they were able to stand firm on their feet, walk forwards, and when thrown into the air could move their wings with ease. The pigeon lived three months, and became very fat. On being killed, a thin layer of a yellow mass was found on the divided surface of the brain of the bird, which I would not however take for reproduced brain.

10. In a hen both hemispheres were cut off close to the base, the optic thalami, and nerves, and the corpora quadrigemina being avoided. It was immediately deprived of all the senses; it sat continually in one spot, as in a deep sleep, and manifested no wish for anything around it. It never moved of its own accord, but only when irritated, and then but for a few steps. The motions of the iris were unimpared, and those of the extremities in the natural state. The hen took no food, it merely swallowed a few pease which I put into its beak. On the second and third day after the experiment, a violent fever came on, which went away without any bad consequence. The hen lived three months, in a state of stupefaction.

In several rabbits and pigeons, sometimes one, at other times both hemispheres were removed lengthways from before, backwards, sometimes only superficially, at other times close to the base. The disturbance in the power of the senses, and the muscles, was just the same as that which followed the transverse divisions. But still it is very remarkable that all the symptoms sometime afterwards always disappeared, and the use of the senses was generally restored between the sixth and sixteenth day, in proportion as the incision was superficial or deep. The experiments were repeated on different animals, and if under favourable circumstances always with the same results. I think myself warranted with Flourens, in drawing the following conclusions:

1. That the hemispheres of the cerebrum are the true seat, or the central point, of all the perceptions, of consciousness, of understanding, and of the will.

2. That the so called powers of the mind and of the senses, have a common seat in the hemispheres; for when one of these functions is either weakened or entirely destroyed, the others suffer in the same proportion, and when one is restored the others return.

3. That a portion of the hemispheres may be taken away, without their functions being entirely destroyed.

4. That the power lost by the partial destruction of their mass gradually returns.

5. But that this restoration of power only follows, when the destruction or injury has not gone beyond a certain point, for then this power remains for ever destroyed.

6. That this annihilation of the power of the brain, or of the functions, manifests itself stronger in proportion as the destruction of the hemispheres has been carried low down or not.

7. That a transverse incision carried through the hemispheres to a certain depth, destroys the functions of these parts just in the same degree as their removal would do; and that when the injury is carried to the base, it is followed by a total loss of the functions.

8. That a longitudinal incision through the hemispheres, carried from before backwards in proportion to the depth, impairs the function in the same way as the transverse incision; but that these functions, even after the injury has been carried deep down, are again restored.

9. That the substance of the hemispheres, although these are the centre of all the perceptions, are insensible to external irritations.

10. That irritations and even injuries of the hemispheres produce no involuntary motions of the muscles, merely weakness and paralysis of them, which are always shown on the side opposite to the one on which the injury was inflicted.

11. That the operation of the hemispheres follows in a crossed direction.

12. That the *consensus communis*, or the conæsthesis, as it has been termed, is not dependant on the hemispheres alone, since it remains after they have been destroyed.

13. That the respiration and circulation are independant of the action of the hemisphere, since no important change in these two functions was perceived during the experiments made with these parts.

[*Continuation of these Experiments next week.*]

PATHOLOGY.

In some recent numbers of the *Revue Medicale*, a good deal has been said about a disease to which the term *dothinenteritis* (δοθην, glandular swelling, furunculus and εντερον) has been given. Landini,* a young physician, has designated under this name the inflammation of Peyer's and Brunner's glands, which, on repeated examination, he has found more frequently affected than has ever been supposed to be the case. But the fact is that this appearance, of the frequent existence of which we do not doubt, has been taken as the leading pathological character of several diseases of which it was only a small, and perhaps unimportant part. Thus, for instance, Landini has given the name dothinenteritis to every possible kind of typhus.

* Vid. Revue Med., May, 1826.

SURGERY.

De Scirrho et Carcinomate uteri, adjectis tribus totius uteri extirpationis observationibus. Auct. Ed Casp. Jac. de Siebold. Berolini, 1826, cum tab. æneis.

The author of this dissertation has given an account of three cases of total extirpation of the uterus, two of which he saw performed at Gottingen, in 1825, by Langenbeck, and the third by his father, at the lying-in institution, in Berlin. The nature of the operation was different in the three cases. Langenbeck performed one by the linea alba, the others were performed the same as those formerly done by Langenbeck, Santer, Siebold, and Holscher, namely, per vaginam. The result of the operation was the same in the three cases; the patients all died and neither one survived the third day. The author's own opinion appears to us rather against the performance of the operation, since so many have already fallen a sacrifice to it. This was formerly the opinion of the author's father; he afterwards saw reasons for changing it, but whether he has again altered it, we are unable to say.

THE LANCET.

London, Saturday, Sept 23, 1826.

If it be true that "conscience is our coin," and that "he thrives best who has the most to spare," the Council and Court of Examiners of the Royal College of Surgeons in London are, we should suppose, in a most thriving condition. We will not say that they "are rogues by nature," but do not hesitate to assert that their proceedings are characterized by a most roguish aspect. They have been once more at their dirty work, and have sent forth a new batch of REGULATIONS.

The immoral conduct of a dishonest man, when it is known, brings upon him a far greater portion of reproach and disgust, than can be produced by the observations of another party. Such is the case with the Council of the College; their measures have been watched, investigated, and exposed. As literary, professional, and corporate tyrants, they have been brought to the bar of public opinion, where they have received that execration which the evil tendency of their practices was so well calculated to produce. And now that their conduct is about to undergo a further scrutiny before the highest tribunal of the Country, and dreading the loss of that detestable instrument, THEIR CHARTER, under the protection of which so much injustice and tyranny have been perpetrated, they come forward with a view to prevent their exposure and degradation before the legislature, and mock the profession and the public with a *pretence* of liberality, whilst there is concealed the most gross injustice; and in the hope of being absolved from further punishment, they have cancelled a law which they *dared* no longer enforce. A thief at the Old Bailey, with a pretty keen eye to self interest, would act in a manner precisely similar, and claim praise for such magnanimous efforts: but in consequence of this, would a discreet jury and judge allow the wretch to go unpunished? If they did so, there would be no security for character or for property; and where is *our* security for the *future* good conduct of the Council of the College, even admitting, for the sake of argument, (but which, in fact, as we shall presently show, is most untrue,) that their *present* conduct is such as to merit our approval. Are we to permit them to hold a *law*, which they can at all times exercise as an instrument of vengeance against their professional brethren? Are we always to be at the mercy of *such* legislators as the present Council of the Royal College of Surgeons? God forbid! And it shall not be our fault, if the system which has so long obtained in this Institution be not entirely—radically changed. Before we make any further remarks, we will insert the new Regulations, and when we have done so, we will insert likewise the *Regulation* which the funking, whining Council adopted in March 1824, and which these liberal, kind-hearted gentlemen have now benevolently omitted. But before giving the Regulations, let us once more record the *names* of our munificent benefactors—they cannot be seen too frequently; GENERAL PRACTITIONERS, and the SURGEONS of Provincial Hospitals and Infirmaries, who have been so frequently *complimented* and *benefited* by their owners ought constantly to keep them in grateful remembrance! Once more, then, renowned, thrice renowned Council, stand forth at the head of your newly created monster, whilst, as usual, Edmund Belfour constitutes its *tail!*

MEMBERS OF THE COUNCIL.

Messrs. LYNN—FORSTER—LUCAS—BLIZARD—CLINE—HEAVISIDE—COOPER—ABERNETHY—CARLISLE—HAWKINS—HUME—

VINCENT — KNIGHT — WADD — CLINE — THOMAS—HEADINGTON—KEATE—NORRIS—HARVEY—and last, though not least,—AUTHOR GUTHRIE.

"ROYAL COLLEGE OF SURGEONS IN LONDON.

By-law, Sect. XVI. § 1.—No person under twenty-two years of age shall be admitted a member of the College.

Standing Order.—1. The only schools of anatomy and surgery recognized by the Court are, *London*, *Dublin*, *Edinburgh*, *Glasgow*, and *Aberdeen*.

2. Certificates of attendance upon the chirurgical practice of an Hospital, will not be received by the Court, unless such Hospital be in one of the above recognized Schools, and shall contain on an average one hundred patients.

3. The court will, however, receive as testimonials of education, certificates of attendance on provincial Hospitals, containing, respectively, one hundred patients; provided a student shall have *previously attended* two courses of anatomical lectures, and two courses of dissections, in any of the recognized schools of anatomy. But the Court require, that the term of attendance on such provincial Hospitals shall be of twice the duration of that required at Hospitals in any of the recognized schools.

CANDIDATES will, conformably to the above by-law and standing orders, be required respectively to produce, prior to examination, certificates,

1. Of being twenty-two years of age.

2. Of having been engaged six years, at least, in the acquisition of professional knowledge.

3. Of having regularly attended three winter courses at least, of lectures on anatomy and physiology, delivered at subsequent periods; and also one winter course, at least, of lectures on surgery.

4. Of having performed dissections during two or more subsequent winter courses.

5. Of having diligently attended, during the term of at least one year, the chirurgical practice of one of the following Hospitals, viz.—*Guy's*, *St. Thomas's*, *St. Bartholomew's*, *St. George's*, the *London*, the *Westminster*, and the *Middlesex*, in London: The *Richmond*, *Steeven's*, and the *Meath*, in Dublin: the *Royal Infirmary* in Edinburgh; the *Royal Infirmary* in Glasgow; or the *Royal Infirmary* in Aberdeen, or of twice that term in any of the provincial Hospitals, conformably to the above standing order, No. 3.

Such certificates must also express the dates of the commencement, and of the termination of attendance on each course of lectures, and of dissections; and the periods of the commencement, and of the termination of attendance on hospital practice.

The required certificates must be delivered at the College ten days at least prior to the day on which candidates shall respectively be desirous of admission to examination.

CANDIDATES under the following circumstances, and of the required age, are also admissible to examination.

Members of any of the legally constituted Colleges of Surgeons in the United Kingdom.

Graduates in Medicine of any of the Universities of the United Kingdom, who shall have performed two or more courses of dissection, as above specified, No. 4, and who shall have regularly attended the chirurgical practice of one of the Hospitals, as above described, No. 5.

EDMUND BELFOUR,
Lincoln's Inn Fields, Secretary.
8th Sept. 1826.

Such, then, are the Regulations which have been just issued; and now let us record the one which the Council have omitted:

"That certificates of attendance at lectures on anatomy, physiology, the theory and practice of surgery, and of the performance of dissections, be not received by the Court, except from the appointed professors of anatomy and surgery, in the Universities of Dublin, Edinburgh, Glasgow, and Aberdeen; or from persons teaching in a school acknowledged by the medical establishment of one of the recognised hospitals, or from persons being physicians or surgeons to any of those hospitals."

Did the Council suppose that we had forgotten this Regulation? if we had, we believe they have not forgotten what we said of it in one of our Numbers for January 1825;* lest, however they should have done so, we beg once more to call their attention, and that of the Profession to our denouncement of it, at the above period: "Pray read this Regulation again and again, and *curse* it with each reading; CURSE the man who framed it; and CURSE the men who adopted it;

* Vol. vi. p. 91.

let the College Examiners be henceforth spoken of only in conjunction with deeds of infamy, arrogance, injustice, and folly; let them be held up to public reprobation, to public—to universal scorn."

Did not the partial operation of that law warrant the above unqualified language? Was a more disgraceful edict ever vomited forth by any set of tyrants in any country?—Never The obvious *tendency* of that Regulation was to enrich themselves, their relatives, and their toad-eaters! What circumstances called for the framing of that law in March, 1824, which do not exist NOW? If the law was THEN enacted upon sound, upright, honourable principles, why is it NOW abandoned? It is the duty of a legislator to lose his head, rather than assist in the abrogation of a just law—popular clamour should never influence, in the slightest degree, the decisions of a senate. If this Regulation of the College had been founded on just principles, they need not have dreaded Parliamentary inquiry. If their reasons for enacting it would have borne examination before the Legislature, some portion of that immense blot which now degrades their legislative robes, might possibly have been wiped away. Let them not think that by rescinding this Regulation, by this act of sycophancy, cowardice, and meanness, they will be absolved from an appearance in the House of Commons; let them not suppose that the cause of the surgical reformers is, in any degree, weakened by this their concession; on the contrary, it adds incalculabl to its strength, as they now stand before the public the acknowledged confessors o their own misdeeds. They have struck out this Regulation not as a boon to the profession, but in the hope of its proving ultimately the source of a most valuable boon to themselves. But they are by far too deeply immersed in the despondency of difficulty to be so easily extricated, and no shallow, lame trick of this description, will have the effect of deceiving a single member of the College; indeed, whilst their floundering imbecility will stimulate the Surgical Reformers to new exertions, and inspire their minds with the most perfect confidence of ultimate success, it will, on the other hand, throw the supporters of the Council, the "Hole and Corner" gentry, upon the horns of a dilemma, from which it will be a long time ere they will be enabled to extricate themselves. These slippery reptiles, who are continually floating in their own slime, supported the "Regulation," and applauded the College during its existence, and now, doubtless, these sycophants approve of its abrogation, and still uphold the College; but at last these creatures are looked upon by the intelligent portion of the profession with the utmost contempt; they are mere maggots, engendered by hospital corruption.

Without attributing bad motives to the "ruling powers," we cannot avoid referring to the fact, that of the ten examiners who framed this "Regulation," directly in favour of the LONDON Hospital Surgeons, seven of the said Examiners were at that very moment, THEMSELVES LONDON Hospital Surgeons!! Here they are—Messieurs ABERNETHY—COOPER—LYNN—CARLISLE—BLIZARD—HOME, and (oh! hydraulics!) HARVEY; and of the other three, Messieurs CLINE, FORSTER, and DUNDAS, the nephew of the first, Mr. J. H. GREEN, was surgeon to St. Thomas's Hospital; and the second of these *disinterested* legislators, Mr. FORSTER, was, at that very time, PARTICIPATING in the *fees* paid by the students to the Surgeons of Guy's Hospital.

These facts are certainly very curious; but no one, of course, would assert, or, indeed, could any one believe that these Gentlemen framed the "Regulation" from

motives of self-interest, and we are sorry that the facts above stated should have been so connected with the transaction, as to have warranted any suspicion of the uprightness of their intentions. The facts, however, are as they stand; it is not our business to alter them, and we rejoice that we have not to endure the odium which they have cast upon the public conduct of the parties implicated. Once more we ask, what circumstances existed in 1824, which called for the adoption of the "Regulation," which do not exist NOW? Was it because there were too many Anatomical Teachers in 1824? That cannot be, as there are more—many more Teachers NOW, than there were *then*. Has it been abrogated from a conviction of error, and from a sincere desire to act liberally and justly towards their professional brethren? NO; for a confirmation of our assertion, we appeal to the "Regulations" as they at present appear in their *liberal* dress. Mr. Abernethy is reported to be the *tailleur*, but he has again made "short work of it;" this gentleman's extreme liberality might be inferred from his declaration four years ago to one of the present Examiners: "There are already eleven Lecturers on anatomy in London," said he, "and it is high time that we should begin to take care of OURSELVES;"—thus it is reported by persons whom we believe; we hope Mr. Abernethy will authorize us to deny its truth, should he not do so, HIS *disinterestedness*, at least in adopting the late "Regulation," will be very equivocal.

Although the College on this occasion has been lauded by a portion of the Press, by some venal scribes who would betray their friends, sell their country, or deny their God, for a mess of pottage; and although the "Hole and Corner" maggots twist themselves into all sorts of contortions, in approval of the conduct of their masters, upon whose cheese-parings they feed, yet a careful examination of the "Regulations," as they now stand, clearly shows that they have been at their old game of *vingt-un*, and that their proceedings have been nothing but shuffle and trick; in fact, taking all the circumstances into account, we think the present regulations are *worse* than any which have preceded them, inasmuch as the Ruling Powers had better information to work upon than at any former period; had better *data* on which they could ground their measures; and yet, still bearing the stamp of narrow-mindedness, they are ushered into the world as a testimony of their condescension and liberality—liberality! thus adding the hellish sin of cant to the crime of injustice. We beg to call the reader's attention to the following clause, when he will at once discover that our strictures are well merited.

"The Court will however receive as testimonials of education, certificates of attendance on provincial hospitals, containing respectively one hundred patients; provided a student shall have previously attended two courses of anatomical lectures, and two courses of dissections in any of the recognized schools of anatomy. But the court require, that the term of attendance on such provincial hospitals shall be of twice the duration of that required at hospitals in any of the recognized schools of anatomy."

This Regulation was first issued in March last, and on the present occasion, three little words, which immediately succeeded the word "patients," are omitted, so that the first sentence then stood thus,

"The Court of Examiners will, however, receive as testimonials of education, certificates of attendance on provincial Hospitals containing one hundred patients UNDER CHIRURGICAL TREATMENT."

Such was the "Regulation" when issued in March last; but in this shape it was SO FLAGRANTLY UNJUST, that the

Court has thought proper to erase "under surgical treatment." Thus these worthies, two of whom are surgeons to the Westminster Hospital, required that a pupil should attend *one hundred patients* for TWO YEARS in a country hospital, whilst an attendance on FORTY-TWO patients for ONE YEAR in the Westminster, was sufficient to gratify their scientific appetites; this is another portion of their game of *vingt-un*—more of their justice—more liberality! Pretty legislators! What alteration, either in the *spirit*, or in the *operation* of the "Regulation," does the omission of the three words "under surgical treatment" effect? None whatever; it was at *first* a proscription of students' certificates from Provincial Hospitals and Infirmaries, and *so it is now*—it was at first a robbery of provincial surgeons, and *so it is now*. In the first place, it requires *two years'* attendance on a country hospital, whilst *one year's* attendance on the Oyster's and Gaffy Lynn's Hospital, is deemed sufficient. Two years at the Manchester, Birmingham, Exeter, Liverpool, Lincoln, Leeds, or Norwich Hospital—all of which contain *more* patients than the Middlesex and Westminster, and yet *one year's "walking"* is enough at this latter humbug Institution, which contains only FORTY-TWO BEDS FOR SURGICAL PATIENTS—more liberality! But this is not all; there is another portion of the Regulation which requires some little notice—another gem from which the rays of impartiality and liberality shine forth in real splendour. After "patients," as the Regulation now stands, come these words, "Provided a student shall have previously attended two courses of anatomical lectures, and two courses of dissections in any of the recognized schools." Well, these certificates on provincial hospitals, such as we have above named, will be received by the Court, if the student can produce certificates of having PREVIOUSLY attended in *London, Dublin, Edinburgh, Glasgow*, or *Aberdeen*, TWO COURSES of Lectures on ANATOMY, and TWO COURSES of DISSECTIONS.

We do not know how to designate this edict, otherwise than by saying that it is most diabolical—a more barefaced or more infamous injustice we never beheld; and this Regulation, if it were to continue in force, would plunder many of the most deserving and talented Surgeons in this country. It is, we repeat, a PROSCRIPTION of the Country Hospitals, inasmuch as it is impossible that the provisions of the order can be complied with. How is the apprentice, whether residing ten or two hundred miles from London, to attend two courses of Lectures and Dissections, previously to his attendance on provincial hospital practice;—will any prudent parent allow his child to be on the pavé of this metropolis without a protector, at the age of 15 or 16? Certainly not; and this the Examiners well know. They also know, that the Regulation is a mere deception—a cheat independently of the two courses of Lectures. WHY should the attendance on a provincial hospital be of *twice* the duration to that of the Hospitals in London? Good heavens! twice the attendance on the Country Hospitals above named, to that on those wretched places, the Middlesex, the St. George's, and the Westminster.

Let it not be supposed that we deny the *legality* of the College regulations; on the contrary, their present CHARTER empowers them to rob with impunity every member of the College; it is the Charter which it is the object of the surgical reformers to abrogate; and our cause, although it did not require to be strengthened, is now a thousand times better than it was a fortnight since.—It is impossible that this College, constituted as it is, can stand; its conduct degrades the medical profession from one extremity of the kingdom to the other; and whilst it is

permitted to issue laws, disgraceful to the profession, and injurious to society, it will be in vain for its Members to look for the respect or the confidence of the public.

Referring to the case of costiveness, published in No. 158, p. 753, of this Journal, Mr. Williams, the surgeon of Aberystwith, writes that he is "now informed, upon unquestionable authority, that the patient's bowels were not opened from the 23d of July to the 8th of September, 1826, being a period of *seven weeks and five days.*" In other respects there is no alteration.

Mr. Ollard, of Upwell, Norfolk, has sent us the case of a man who had taken six drachms of laudanum, which was removed by the stomach pump, after three hours and a half had elapsed, to the recovery of the patient.

Mr. W. Kingsley, of Valley House, Roscrea, Ireland, surgeon, writes as follows:—

Sir,—I beg leave to draw your recollection to two cases of diseased bladder, related in the 154th Number of the Lancet, page 633; and I do so with the hope of being able to alleviate the misery of their situation, by transmitting through you two popular receipts which I have lately had an opportunity of trying with the most happy effects, in two nearly similar cases. Both the patients I allude to are nearly 70 years of age. The first labours under disease of the prostate gland, and has done so for many years, sometimes causing retention of urine, abscesses about the neck of the bladder, considerable muco-purulent discharge in his urine, which used to be voided with considerable pain, and very frequently, particularly by night. The second gentleman used to pass red gravel* for thirty years, and occasionally blood, upon any severe exercise. For some years past, he had frequent occasion to make urine, which he did with difficulty and pain, and very little at a time. About two years ago complete retention took place a couple of times, which was relieved by the catheter, in passing which, considerable enlargement of the prostate gland was discovered, particularly of Home's lobe. In August, 1825, the catheter could not be passed, and the bladder was tapped above the pubes; abscesses formed at the neck of the bladder, and in one testis; his bladder became most irritable, so as to compel him to make urine every hour at night, with very severe pain; both these cases were relieved by the following receipts, after trying several remedies in vain, viz. decoct. fol. uvæ ursi cum tinct. hyos.; infus. fol. buchu et tr. buchu; liquor potassæ; mur. hyd. dissolved in æther nitros; leeches to perineum; balneum tepid, &c. &c. No. 1. Boil four* branches or stems of meadow sweet, for ten minutes, in three pints of water, add a tea-spoonful of nitrous æther, and sweeten with honey; half a pint to be taken three times a day. The root dried like coffee, and ground, may also be used, by adding an equal part of brown sugar to it, a tea-spoonful to be taken three times a day. No. 2. One handful of parsley root, one do. of marsh mallow root, one do. of water parsnip root, one do. of red nettle root, two ounces of liquorice root, boil them slowly in a close covered earthen vessel to three quarts, putting them down in six quarts of water, a quarter of a glass to be taken night and morning; if found to agree with the bowels and stomach, half a noggin may be taken. Both those gentlemen have continued many months in great comfort, free from pain and irritation: they use the receipts *alternately*, and consider the last most astringent. It is the top and not the root of the water parsnip *they* employ in making the decoction.

The meadow sweet, (spiræa ulmaria of Linn. Sp. Pl. 702,) was formerly held in great repute. "I can solemnly affirm," says S. Pauli, "that queen of the meadows (ulmaria, regina prati) has had surprising effects on a girl who had a mortal wound in the bladder." *Raii Hist. plant.* The water parsnep (pastinaca aquatica) of the second formula, and the *nettle* (ur-

* The constant use of calcined magnesia for some months, very soon removed every symptom of red gravel, which he had been passing for thirty years.

* These receipts were obtained from a French surgeon, attached to the French expedition that landed at Killala.

tica dioica) are extolled by the same author and by Dioscorides, 2. 154, for their properties in calculous complaints. The same of the parsley. We rather think asparagus also exerts a particular influence on the kidneys and bladder.

A Correspondent complains, that an "implied contract" at Bartholomew's Hospital, by which gentlemen are to "observe that the area of the operating theatre is for the surgeons and *dressers of the operator only*, the first row (of benches?) for the other dressers, and the remaining rows for the rest of the pupils," is most shamefully disregarded.

"The whole of the dressers," he says, "impact themselves with the surgeons in the area; the first row is entirely forsaken; the mass of pupils are prevented having even a tolerable view of the operation, and the surgeons are indisputably inconvenienced."

Why may not the pupils follow the example of the dressers, and "impact *themselves* in the area?" We should be very much disposed to disregard all orders or implied contracts which have the effect of giving to a few the privileges of the many. Upon what principle is a dresser to A placed in a better situation with B, than the pupil of both?

We fully concur with the gentleman who thinks a syllabus of the lectures he attends a desideratum. If there be any catenation of ideas in the discourses, it must enable him to make notes with greater facility, regularity, and order. The trifling expense should be borne by the lecturers. Sir A. Cooper had such a syllabus, and Messrs. Lawrence and Wardrop have followed the example.

An Inaugural Dissertation on the Properties of the Apocynum Cannabinum (Indian Hemp); submitted to the Trustees, President, and Medical Faculty of Jefferson College. By M. N. KNAPP, Licentiate of the Chenango Med. Soc. N. Y.

APOCYNUM, called also *cynocrambe, cynomoron, cynanchon*, and *dog's bane*, from its effects on that animal, and *hippomanes*, because it is said to produce madness on horses, (Theocrit. Idyl. 2,) is a term so confusedly employed by the ancient writers to designate a variety of plants, that little certain knowledge of its identity can be gleaned from that source, although it will appear by a reference to Hippocrates, Dioscorides, Theophrastus, and Pliny, that the properties of some of the species which Dr. Knapp has undertaken to describe, were not unknown to the earliest practitioners of physic. Boerrhaave enumerates twenty-two species of the apocynum, but is silent respecting their virtues. The apocynum erectum minus latifolium Americanum, flore umbellato aurantio, petalis reflexis radice tuberosa, Brey. Prod. 2. 15, which, according to Dale, was imported from America under the name of ipecacuanha, corresponds with the plant in question. Dr. Harris says, that it comes from Jamaica, Porto Bello, and Virginia, and that it vomits and purges excessively, "even to exhaust the strength." The filament or fibre which runs through the meditullium of the true ipecacuanha, being of a whitish ash-colour, while that of the bastard species, or apocynon, is yellow, sufficiently distinguishes the roots, which, when powdered, are often confounded with each other. It is not improbable that the anomalous effects which the ipecacuanha of the shops has often produced, may be referred to th's cir-

cumstance, and the impunity, in the present instance, with which unprincipled druggists may indulge their darling propensities; and it is more to put our readers on the guard against this, than for any very high expectation we entertain of the virtues of apocynum, that we have noticed the present thesis.

Under the genus *apocynum*, Michaux has described only two species, the *androssæmifolium* and the *cannabinum**. Pursh† and Barton‡ mention a third, which they call *hypericifolium*; and Nuttall‖ says there are other species indigenous to southern climates, but has not stated their characters. The first species has received the attention of Dr. Bigelow of Boston, in his work on Medical Botany, Vol. II. 148. The cannabinum, the plant which has engaged the attention of our author, is the second species of the genus apocynum, class pentandria, order digynia; natural order contortæ of Linné.

The characteristics of the genus are,

"*Calyx*, very small, five-cleft, persistent. *Corolla*, campanulate, half five-cleft, lobes revolute, furnished at the base with five dentoid glands alternating with the stamina. *Anthers*, connivent, saggitate, cohering to the stigma by the middle. *R. Brown.*

Style, obsolete; *stigma*, thick and acute; *follicles*, long and linear; *seed*, comose. *Nuttall.*

The first and second species resemble each other so much, that a careless observer might easily mistake one for the other. I have therefore given the description of both, that the specific difference may be the more apparent.

1. Apocynum androssæmifolium. *Leaves*, ovate, glabrous; *cymes*, terminal and lateral; tube of the corolla longer than the calix. *Brown.*

Common dog's-bane, tutsan-leaved dog's-bane. From two to three feet high. Flowers, pale red and striped. On the borders of cultivated fields, frequent. Perennial. July. *Barton.*

2. Apocynum cannabinum. *Stem*, upright; *leaves*, oblong oval, with hoary pubescence underneath; *panicle*, pubescent; the limb of the corolla erect. *Willd. and Pursh.*

Indian hemp. Resembles No. 1, easily distinguished, however, by the leaves and flowers, which are greenish white, or yellowish green, and smaller than those of No. 1. In similar places with the preceding. Perennial. June, July. *Barton.*

Its sensible properties are the following; it bleeds freely if wounded, and the concrete juice exhibits the properties of gum elastic. It has a strong odour, and a nauseous, subacrid, lasting bitter taste. The colour of the young roots is similar to that of the Irish potatoe, but the old roots are of a dark chesnut colour, approaching to black. It looses 45.8 parts in a hundred by drying, fractures transversely in its cortical portion, shrivels, and assumes a darker colour. When fully dried, it is extremely *spalt*, breaks short, and is easily reduced to powder, in which state *it very much resembles ipecacuanha.*

Determined to "a trial of its powers on his own system," Dr. *Knapp* "weighed two powders of xv. grains each, mixed one with a teacupful of warm water, and commenced taking it in the morning at a quarter before twelve, fasting; in usual health, pulse 70."

"I began," he says, "with two tablespoonfuls; in fifteen minutes felt a slight nausea, took two spoonfuls more, and in another fifteen minutes took the remainder, which provoked efforts to vomit.

After fifteen minutes more had elapsed I mixed and took the other powder, with a difficulty, however, unpleasant to reflect on. At one o'clock I vomited slightly, felt weak and sleepy, and went to bed. Drinking warm water would then doubtless have provoked full vomiting, but I chose to wait the effects of the medicine alone. After getting quiet in bed, I examined my pulse, and found it fifty strokes to the minute.

I had some headach, felt bewildered, drowsed, and fell asleep. I slept for more than an hour; was then awakened with extreme sickness, followed by two

* Flora Boreali Americani, tom. I. p. 122.

† Flor. Americ. I. 179.

‡ Flor. Philadelph. I. 130.

‖ "Of this genus there are several other species in South America, India, and the Cape of Good Hope; and one species *A. venetum*, said to be indigenous to the islands of the Adriatic."—*Gen. of North Amer.* plants, I. 162.

spells of full vomiting, in the interim of which, I examined my pulse, and found it forty-five to the minute. About a quart of fluids, together with the powder and some bilious matter, were thrown off. I felt the stimulus of it passing onward into the intestines, and judged that it would also prove cathartic; which it did on the following morning, in a gentle way, without any griping, and kept the bowels in a soluble condition for a day or two. While under its immediate effects I noticed a very considerable increased secretion of mucus and saliva from the mouth and fauces, which kept me constantly spitting, and also an augmentation in the secretion of urine. Upon the whole, relative to its operation, although it produced a very great diminution in the frequency of the pulse, yet it occasioned none of that death-like prostration I have aways experienced on taking the tartar emetic; and although its bitter sub-acrid taste is very persistent in the fauces, yet I think it no more disagreeable to take than the ipecacuanha, while at the same time it operates as effectually as either. It will, however, perhaps, be objected to on account of the tardiness of its operation: on this score it requires further trial, and in larger doses, before determining. Relative to myself, I can remark, however, that I have been obliged to take as many as sixty grains of ipecacuanha, with a less speedy, and less efficient operation than I experienced from this potion. I never to my recollection took an emetic that had so tranquillising an effect, operated so fully, and at the same time produced so little debility. Its operation in my case would at least suggest an inquiry into its properties, whether it may not unite an anodyne principle with its emetic qualities?"

The properties of the apocynum so nearly resemble those of ipecacuanha, that we do not think it necessary to quote from the other cases which the author has related. "It is inferior to ipecacuanha," says Dr. Ives, an American, "requires larger doses, and is not so much of a diaphoretic." There is a case of ascites, however, in which

"Its effect was that of a hydrogogue cathartic, producing as many as forty copious watery stools, in twenty-four hours. It also occasioned great sickness and vomiting. The system was soon relieved of all dropsical effusion, and in two months time, without the aid of any other *remedy whatever*, the patient's health and strength completely re-established. This gentleman has since recommended it to some of his acquaintances labouring under dropsy, and, in general, with the happiest effects."

This accords pretty well with the statements of an old writer. "Having directed half a drachm of ipecacuanha," says Dr. James, "the patient vomited excessively, and thin watery stools came from him insensibly for several days. This made me think he had taken apocynum instead of ipecacuanha." It seems then, that the former is inferior to the latter in emetic, and diaphoretic properties, but that it acts more on the bowels, for which reason it may be worth the trial on few dropsical patients."

NEW SURGICAL OPERATION.

There is, in the middle of each tooth, as every anatomist knows, a little cavity, in which the fine branches of nerves passing through the roots of the teeth are expanded. This expansion of nervous matter is the seat of sensation in the teeth; and when, by caries or decay of the enamel, it is exposed to the influence of external agencies, the patient is generally obliged, on account of violence of the pain, to have the whole tooth pulled out.

An ingenious surgeon from America, lately settled in London, has satisfactorily shown that the diseased part of the tooth, including the cavity above described, may be cut off with the greatest ease and celerity, and that the sound root or roots may be allowed to remain in their sockets. This mode of procedure has been shown and explained to the most scientific surgeons of this city, who have, without exception, expressed their conviction of its utility. The operation has been performed on more than two hundred members of the profession, and they have invariably declared that it occasioned no pain, and that it could scarcely be felt; as their own certificates show. The instruments used for this purpose, are very simple; they are a few plain forceps, right angled and straight, with cutting edges,

like the common surgical bone forceps; but these edges are made accurately to fit the necks of the teeth, and only the necks; so that, however decayed a tooth may be, the forceps may be safely and easily applied, without any risk of breaking the tooth. Having been thus carefully applied on the neck of a tooth, the edges of the forceps should be held parallel to the edge of the gum, and should be made to press it down a little, in order to get at the neck about a line below the usual height of the gum; the handles of the forceps are then pressed gradually but firmly together, and in a moment the upper part of the tooth snaps off, including the cavity containing the expansion of the nerve, and thus in an instant permanently relieves all pain.

The advantages of this operation are—1st. It is painless, and instantaneously performed.—2d. The surface of the sound stump remaining in the jaw presents a firm base for mastication, or for the fixing of an artificial tooth.—3d. What is of greatest moment, the stump or stumps left in the jaw afford a firm support to the adjoining teeth; without which support, the alveolar process, corresponding to the part before occupied by the diseased tooth, and a part of the insterstial structure of the jaw, become absorbed; the adjoining teeth in a few years become loose, and ultimately prematurely fall out, as daily experience shows.

Mr. Fay has, for his improvement in this branch of surgery, and for other forceps for the perpendicular extraction of teeth, when extraction may be absolutely required, received the large silver medal from the Society of Arts; and the instruments, with engravings, will be published in the next volume of the Transactions of the Society.—*Morning Herald.*

We deem this a very ingenious and safe operation, and have no doubt that it will be generally adopted. It is not intended entirely to supersede extraction, as there must occasionally be cases in which, in consequence of diseased *fangs* or jaws, that operation will be required: such cases, however, are very rare, in comparison with those of diseased *crowns:* consequently, the procedure above described, is applicable to the great majority of cases of carious teeth.

BARON LARREY'S VISIT TO DUBLIN.

Dublin, Sep. 2, 1826.

THE announcement of Baron Larrey's intention of visiting Great Britain during the present Autumn, by your correspondent in Paris, inspired us here with some hopes that the "distinguished foreigner," as the newspapers phrase it, would include the Irish Metropolis in his trip of observations. His great professional celebrity, his long and laborious services as a military surgeon, added to the character for honour and disinterestedness bestowed on him by Napoleon in his "Memoirs," excited the public curiosity not a little to see a man, whom so many and such rare qualities naturally rendered an object of interest. Every person, in short, wished to behold an individual whose talents and integrity had been so highly valued by so excellent a judge of both as Napoleon; and even private parties had been concerted for the better enjoyment of his society. The abruptness, however, of his arrival, and the shortness of his sojourn, completely disappointed these expectations, and but few had an opportunity of gratifying their wishes by a glance at the survivor of the Egyptian and Russian campaigns. Without his approach being in the least suspected, he stopped but one day, and so far escaped the annoyance of being stared at like a wild beast, as his deceased master used to say at St. Helena, and probably evaded the misfortune of being *dinnered* into a dyspepsia, by the importunities of Irish hospitality. This, it appears, was not his object; for having sailed from Havre to Southampton, where he forgot his letters of introduction, he proceeded direct to inspect that wonder of the age, the chain bridge at Menai, and pursued his course to Dublin; so that on landing here, he found himself in rather an awkward predicament, without his credentials, or as much as knowing the names of one of our Provincial Stars, except that of Mr. Cusack, of whom he had heard something from a pupil in France. The short time which he remained here, was principally occupied in visiting a few of our medical establishments, and the College of Surgeons. He was accompanied on the occasion by a Dr. Law, as interpreter, a necessary sort of companion to a Frenchman, in going through the hospitals, as few, if any, of the gentlemen in these institutions, speak the language of that country with any degree of perfection. He seems to be no niggard of his information, having

given his opinions on every case presented to his notice without the slightest reserve. While passing through one of the wards in Stevens', an incident sufficiently characteristic of the Baron's practice, and Mr. Colles' *crassâ Minervâ*, occurred, to merit publicity. The former being asked what he thought of a case of aneurism under cure there, he replied, "he would treat it successfully by the application of ice and the subsequent use of moxa." "Eh!" said the latter, who had been walking behind him at some distance, and overhearing the conversation, "what's that he says? may be he wants a little ice to cool his lips this hot day, for he seems greatly fatigued," and was forthwith dispatching a messenger for a glass or two to the next confectioner's shop, when being informed of the real import of the Baron's observation, the learned professor of York-street, gently titilated the broad disk of his inexpressibles, and assuming a most menancing aspect, exclaimed, "Oh! by J——s, he lies," Most fortunately the point of this impetuous sally was unintelligible to the illustrious stranger; the one being as ignorant of English as the other was of French. He had the misfortune of differing a second time in opinion with Mr. Colles while in this hospital, about a case of cancer, when the latter prefaced his exclamation by one of his solemn apothegms, and remarked, "that whatever it might be called in France, it was cancer sure enough in Ireland." From Stevens' he proceeded to some other institutions, and expressed great pleasure at the arrangements of the Foundling, and the Fever Hospitals. He next visited the College of Surgeons, where he spent about an hour in the Library, and examining the preparations of that sepulchre of useless curosities, the Museum, unapproachable to all, save a few members and licentiates. What his reflections must have been at hearing the key revolve in the ever-closed door of this Tartarus of morbid anatomy, I must leave the corporate Cerberus which guards it to conjecture—well might he have said on passing its gloomy threshold, "they order these things better in France." Having seen every thing worthy of notice, he was conducted to Mercer's Hospital, where he exhibited his mode of cupping. His method has at least the merit of being extremely simple. He first marked out the place of the operation by burning some tow under a glass, and taking an instrument out of his pocket, resembling a horse phleme, scarified the part within the circle, with a lightness of touch and velocity of movement that indicated great manual dexterity. The blood, however, not coming freely on the reapplication of the ignited tow and receiver, he observed, that the subject of the experiment was too fat. A severe case of depressed fracture of the frontal bone, in which the membranes were perforated, afforded him an opportunity of recommending in such cases the application of moxa to the pit of the stomach, and cupping along the course of the spine; a species of surgery which might naturally excite the smile of every British practitioner. He also recommended the use of moxa in a case of ascitis in this hospital; so that we must conclude that the moxa is one of his favourite remedies, though it has been almost entirely abandoned in Ireland.

Thus ended the visit of Baron Larrey to the Hospitals of Dublin, to the great disappointment of our operators, who calculated on the hopes of entertaining him with some dramatic exhibitions of their art. To Mr. Cusack his sudden *exit* was particularly painful, having procured several cases for operation on the occasion; and Mr. Cramptom is almost inconsolable, having anticipated a triumphant revival of his "net," before the illustrious Baron. ERINENSIS.

To the Editor of THE LANCET.

SIR,—You have, much to your credit, advocated the cause of the medical students in the schools of this great metropolis; boldly and fearlessly resuming the subject from time to time, and manfully fighting for them, whenever circumstances called for your aid; for which they have not a little reason to be thankful: at the same time, you must acknowledge, on your part, that in more ways than one, they have assisted you in vanquishing some of your great estenemies, and rejoiced with you in the victory obtained.

Although some change for the better, something like reformation and improvement for the advantage of students, has taken place in one or two solitary hospitals, yet, even there, much *remains* to be done. In others, a thorough revolution is wanting; for such is the present wretched system and management,—such is the want of plan and punctuality to time in attendance, on the part of some of the hospital practitioners on the taking-in days, and on other days when the greatest number of patients attend, that the diligent and conscientious student is kept waiting by the hour, wasting his valuable time in learning nothing, while the mo-

mer: for his anatomical lecture is fast approaching, and he is at last unjustly compelled either to leave the hospital before one half of the patients have been seen and prescribed for, or stay and lose a part or the whole of his lecture. Again, there is such a total want of arrangement, of method, of design, of studious contrivance and agreement, so little proof of a hearty desire on the part of the hospital practioners to manage the whole of the hospital practice in such a way, that the students shall reap the greatest possible advantage during their attendance; there is, I say, such a lamentable defect in these respects; so little pains taken, and so little bed-side instruction given, that it is neither more nor less than downright injustice to the pupils. What with the system altogether, they often run the risk of losing, and, doubtless, do actually lose opportunities of acquiring a correct knowledge of many cases, which, in their practice in after life, would be of the greatest importance to them.

It would take up more of my time than I can prudently spare, to enter into an enumeration of all the defects in hospital instruction, which have, from time to time, forcibly struck my mind. As the season is now fast approaching for the re-opening of the medical schools, and for the attendance of an increased number of students on hospital practice, I hope, Mr. Editor, you will have a *watchful eye* over things; and, in regard to the hospitals in particular, let the profession throughout the kingdom know those of them which are *best* managed, and those the *worst*. I have forborne for the present from naming one of the latter description, which I have particularly in view. Let those persons, whom it more immediately concerns, look at the picture, and they cannot mistake the original. If amendment follows, well; if not, something may hereafter be said, which will draw the curtain aside, and expose *that* original to public view.

I shall now close these observations, by suggesting the propriety of opening a subscription for the purpose of raising a certain sum (and let it be a *handsome* one) to be given to the writer of the best essay on hospital instruction. By whatever means an improvement in these important matters can be effected, it will be productive of great good; and if once a spirit of emulation to excel was begotten among the hospital practioners, the happiest results must follow.

With a sincere desire for the increasing utility of the Lancet. I remain, Sir,

AN ADVOCATE FOR JUSTICE, AND
A FRIEND TO IMPROVEMENT.

[*From our Correspondent.*]

LETTER FROM LEYDEN.

Magni nominis umbra. LUCAN.

Leyden is now only the shadow of its former greatness; it is commercially rich, but poor in reputation—poor, when compared with the times of Boerrhaave, Albinus, and Camper. There is no bustle in the streets, no throngs of students, no hum of merchants; the great gates of the University look melancholy, and the huge houses, now thinly peopled, only remind the traveller of the former splendour of the town.

The Chinese allow no books to be brought within the great empire of the sun; the Dutch, on the contrary, receive all, but of late years have sent none out. It is almost as rare to see a new Dutch book as a Swedish or Norwegian; and only six medical works were published last year in the two kingdoms of Norway and Sweden. The booksellers in Leyden are, for the most part, antiquaries, but they do business after a bad fashion; they have no fixed price for their book, but according as they know the works bargained for to be scarce, so they set a high price upon them. Here again the stranger must be careful not to give what they ask, but usually a third less. They have no catalogues, and indeed it would be difficult to make one where the stock is changing almost daily.

Sandifort, as an anatomical teacher, is well known; he is an ingenious, well-read man, and is very skilful in the putting up of his anatomical preparations. It is impossible to see even the skeletons of animals prepared in a neater way: there is, for example, the perfect skeleton of an enormous snake, excellently shown; the arrangement shows the extreme flexibility of the spine very accurately; it is the same with the other skeletons; they are made to represent the natural actions of the animal, whilst in the museums of Brugmann and Vrolik. every thing looks stiff and unnatural The old Sandifort was a very learned man, and collected a great many rare and curious works.

The original work of Asellius on the lymphatics, Dr. Lactic's Venisque, with illuminated plates, and the rare work of Wirsung, describing his discovery of the pancreatic duct, are among some of the biblical curiosities of Sandifort. The attention of the medical traveller is soon arrested by the museum of the celebrated

Albinus; it was purchased of his widow for six thousand guldens. It is an object of great curiosity. The whole of his preparations are enclosed in two small cases; in the one are the dry preparations, almost all of which are bones: there are many specimens of anormal formations of the teeth, particularly in the upper jaw, which Albinus has described in his Annotationes. There is an excellent series of preparations to show the formation of bone, and the separate bones of the fœtus are put up with greater elegance than I have any where seen; they are preserved in spirits of wine. The injections of the blood-vessels of the pia mater, and of the peritoneum, are very beautiful; the other injected preparations are good certainly, but not very superior to such as are usually found. Having been made by Albinus, however, they are much esteemed. The great art in putting up wet preparations, is to macerate them a sufficient time, *gradually increasing* the strength of the spirit, until all the blood be extracted. The preparation should then be put into pure spirits, and be firmly secured. Sandifort tried to keep this method a secret, and for a certain time succeeded in doing so, much to his discredit. There should be no secrets in science; and particularly in those connected with physic. We should remember that we owe to the labours of our forefathers, most of what we now know of the healing art; and if chance or research have thrown ought in our way likely to benefit mankind, we ought to esteem it our duty to make it known,—we ought, in short, to conceal nothing. The motives of a man may always be regarded with suspicion, who tries to keep any supposed or real advantage a secret. The Dutch are justly celebrated for the neatness of their museums, and this is the principal cause of their spirituous preparations looking so well.

The annual expenses of the student at Leyden are high. I was informed, by one of them, that it requires economy to come through the year with 800 guldens, about 74 *l.*—a much larger sum than would be necessary in any other than an university town. In the Peterschurch are two monuments which no medical man would omit to see; the one is erected to the memory of Boerrhaave and the other to Camper. Boerrhaave's is an urn of white, placed on a pedestal of black marble: on the pedestal hangs a medallion of white marble, with the inscription, "Sigilum veri simplex," and in front is the dedication "Salutifero Boerrhavii, Genio Sacrum, natus d. 31 Dec. 1668, Denatus d. 23 Sep. 1738. The urn is entwined by a wreath of heads, in bas relief, which gives the whole a too overloaded appearance. Camper's monument is simple and neat; his bust in white marble, *à l'antique*, is placed on a pedestal of black; on the front of which is this inscription:—"Petrus Camper, geboren te Leyden, den 11 May 1722, overleden den 7 April 1789. This bust is said to be a striking likeness of Camper; it was sculptured from his celebrated portrait by Runhard Vinkelis. Camper, although very much respected in Holland, was a very vain man, but his arrogance was almost insufferable after he became a member of the States' Assembly. It used to be a favourite expression with him when pointing out any thing he supposed new, "people will always say, that Camper observed this." Boerrhaave was certainly a very rich man, but he did not gain all his wealth by physic; he partook of the commercial spirit of his countrymen, and was at one time a large speculator in wool. His favourite residence was at Lond, just a short distance from Leyden, which he purchased of an Englishman; it was here that he spent so much time in the cultivation of tulips. Brugmann, one of the Professors, is in possession of many of the letters of Boerrhaave; among others is one to a student, who aped Boerrhaave in his slovenly manner of dress. The old gentleman did not like to be mimicked, so he told him, "that although slovenness might become an old man, it was not fitted for a youngling." He was very avaricious, and old Gaubius was still more so; neither of them would give their advice to persons not well known without first having the fees. A nobleman of Mecklenburgh requested Boerrhaave's advice, by letter, respecting his wife; he wrote him twice but got no answer. He sent him a third letter, with 100 ducats, and Boerrhaave, in return, told him that his wife must ride. Now as the Mecklenburghers have very fine horses, they understand by riding, exercise *à cheval*; the noble lady was put on the back of a fine roadster, and in a short time was jolted to death. The husband was very wroth, and wrote Boerrhaave a furious letter, but the old physician sent word, that by riding, in Holland people meant sailing on a canal. He had forgotten, however, that there were no canals in Mecklenburgh.

To the Editor of THE LANCET.

While the profession at large acknowledge the importance of your services, in leading to a reformation of the College of Surgeons of London, an expectation not less general prevails, that you will direct your attention to the Army Medical Board, where your correcting hand may also be usefully applied. Among subjects demanding reprehension, is the countenance they give to contributions among medical officers, for pieces of plate and portraits for the Director-General and his Colleague; which, among all the abuses alleged against the late Mr. Keate, is equalled by none. It is burdensome to the junior officers; it is highly objectionable as leading to, and engendering corruption; and it is but of recent origin, arguing a feebleness in the Board requiring this frail support, which would be spurned by the Board in Ireland, and which is unknown in every other branch of the service. It is incompatible with military usage, it is sordid in the extreme; and it is oppressive on many, who are afraid to refuse, lest they should be visited by neglect. As it is well understood in what manner and by what description of persons, those apparent testimonies of respect are got up, (for they never originate in Commands or in Regiments, but in *London*, nay, even in Berkeley-street, and under the same roof with the Board are the meetings held,) they cannot be considered as expressive of the real sentiments of the great number of the donors; and it is a stale artifice, unworthy of men in public office.

Yours, &c.
SITURUS

P. S. I shall hereafter call your attention to other defects of this Board; and as the Irish Board seems to have been the model after which it was formed, I shall exhibit in what respects the copy falls short of the excellence of the original.

Dublin, July 20, 1826.

To the Editor of THE LANCET.

SIR,—As I understand from a medical friend that THE LANCET is always willing and even anxious to expose any abuses which take place in the Hospitals of London, I beg leave to bring under your notice one which is grievously felt by *those* who are chiefly concerned in them, viz. the patients seeking relief. It is not at all an unfrequent thing, for the poor who apply at St. George's Hospital to be kept for a period of five or six hours before they are attended to. Now considering that the majority of these belong to the working class of society, who can ill afford to loose half a day's employment, and who apply, perhaps, merely to be bled, or for any other operation which might be performed in a few minutes by one of the dressers, it is surely a cruelty, (and I should conceive a very likely means of increasing their malady,) to keep them waiting so long, exposed to the currents of air passing through the various passages in the Hospital. I am induced to bring forward this subject from having lately sent a boy, who was very unwell (seemingly from a great fullness of blood in the head) to apply for advice, and to get bled if necessary. He was there by ten o'clock, and not having returned by four, a person who was sent to inquire what could be the reason of his long absence found him still patiently waiting, as nothing had been done for him. A person was at length got, who cupped him to the extent of *two ounces*, which I understand was nearly useless, as he has since had to loose ten times that quantity elsewhere. He says, that several other patients who were with him, after waiting for three or four hours, went away without any relief being afforded them. Another case was mentioned to me by a friend who sent a servant girl, with inflammation of the lungs, to the same Hospital (who eventually died in Queen's Ward,) and who was kept four hours before being admitted. I would wish to learn, Sir, also, through the medium of your excellent publication if it is true that all the clothes of a patient deceased are kept for the benefit of other patients, as was the case with those of the girl above mentioned, even to her bonnet, shawl, &c. Of what utility THEY could be to patients I know not. Trusting that as the motives of this communication are for the benefit of others, they will not be deemed useless as coming from one little acquainted with the regulations of the London medical establishments.

I remain, Sir,
Yours truly,
LONDINENSIS.

Tuesday morning.